JULY • 1959

FIREMEN

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Midland, Michigan's Worst Fire Loss — *see page 7*

ONAL FIRE
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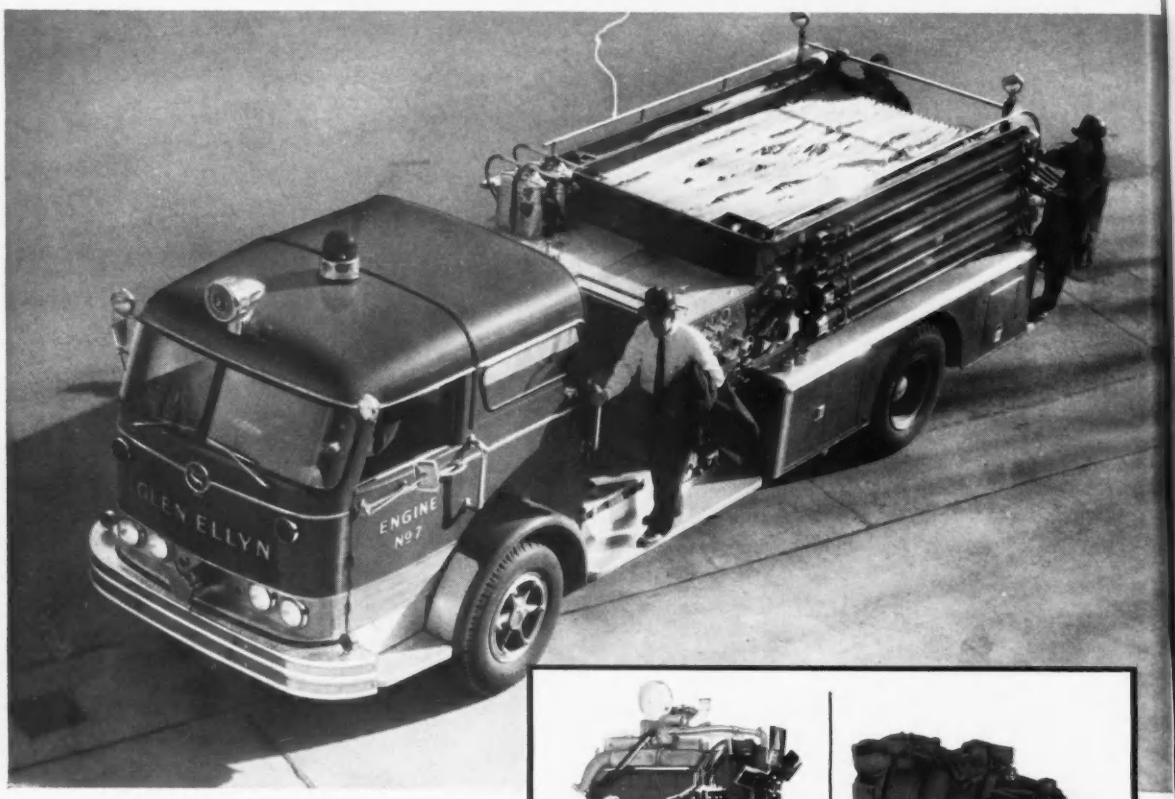
64th year

WHAT IS THE FIRE FIGHTER'S JOB? › › › Page 8

"PUNCTURE" NOZZLE FOR CELLAR PIPE › Page 16



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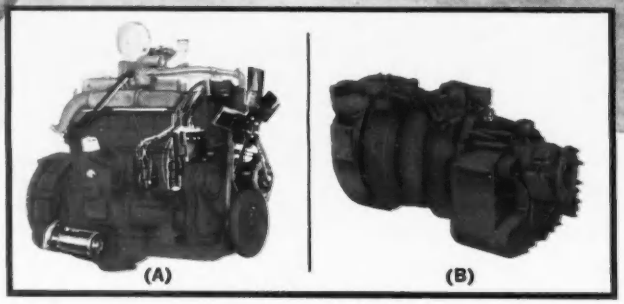

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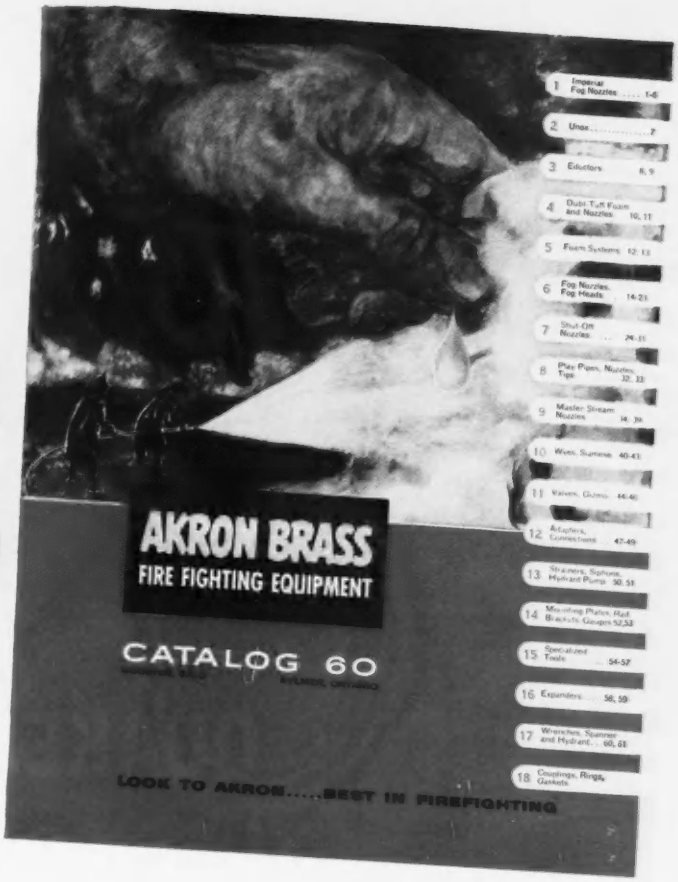

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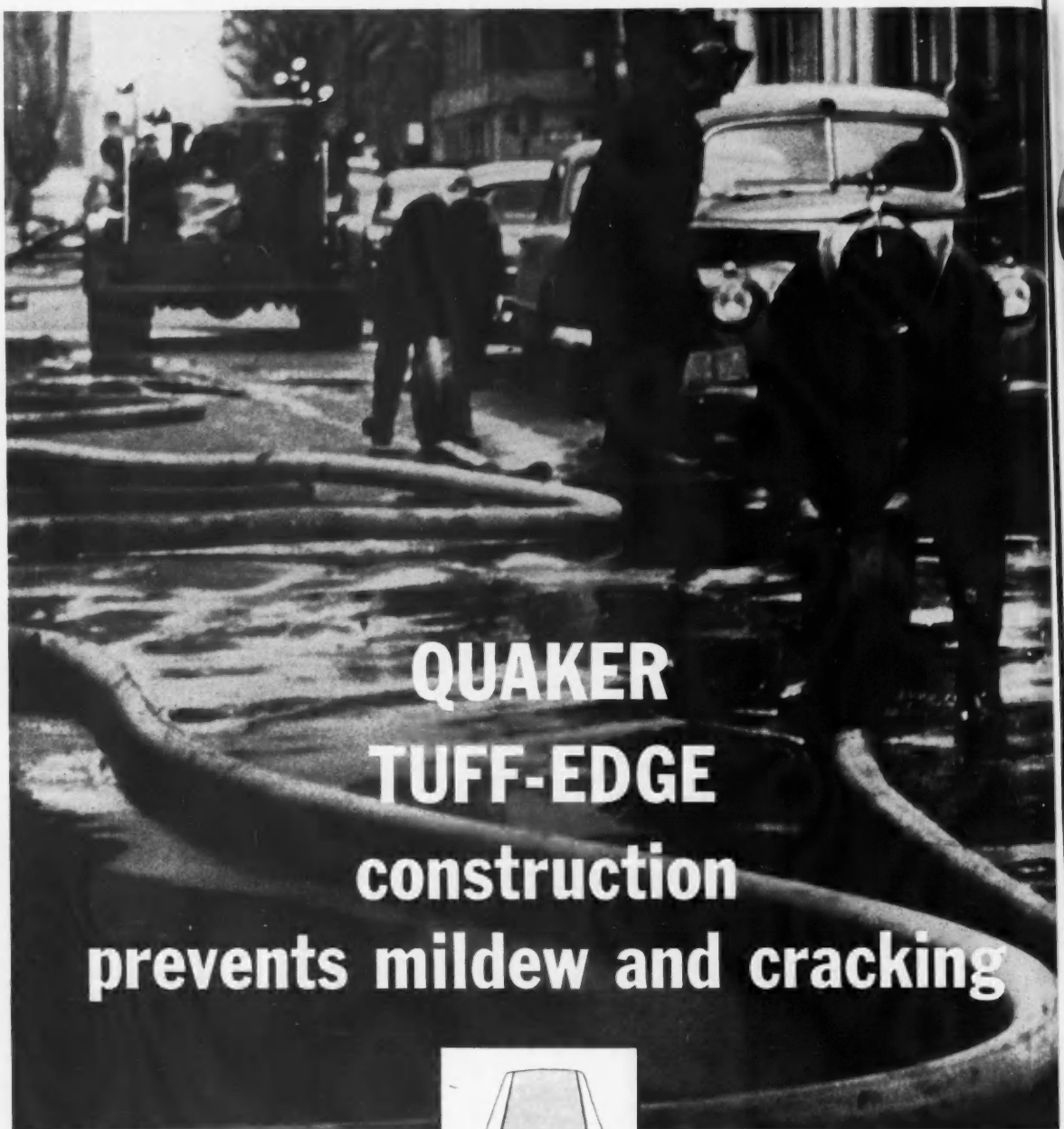

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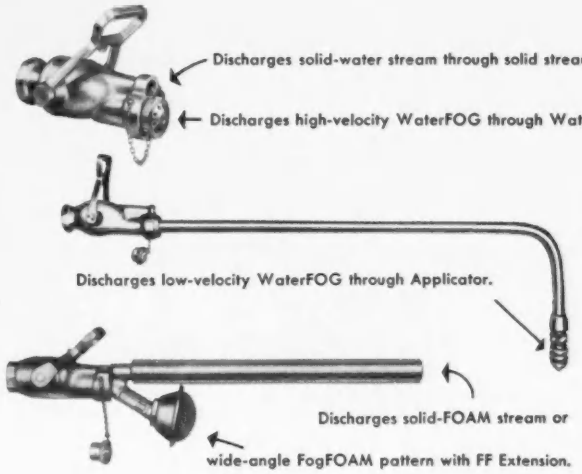
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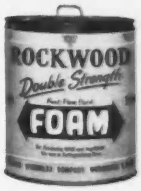

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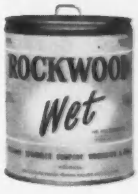

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FIREMEN

A monthly magazine published for the fire service members of the National Fire Protection Association, 60 Batterymarch Street, Boston 10, Massachusetts.

Volume 26 • Number 7

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By now most fire departments have established plans for Fire Prevention Week activities during October 4 through 10. To meet the continual demand for posters, literature and other materials which fire departments can use specifically for that week, the NFPA once again has prepared a number of colorful items. These are designed to reach the many different segments of the public with the important message, "Remember — Fire Prevention Is Your Job . . . Too!"

A complete list of the new Fire Prevention Week materials appears on the inside back cover of this issue. A copy of the new 11- by 17-in. poster appears in color on the back cover.

Each year when these useful items become available, the NFPA Publications Department is deluged with orders from municipal fire departments. Unfortunately, there are always a few orders which arrive too late for the materials to be sent to the community in time for Fire Prevention Week. We suggest, therefore, that readers of FIREMEN magazine take advantage of this early announcement of the Fire Prevention Week materials. An order placed now will assure quick delivery of the requested items so that your fire department can distribute the posters and booklets well in advance of Fire Prevention Week.

●

The chief of one large city fire department has announced a program of pre-fire planning covering key blocks in his community. As usual, the newspaper announcement states that this "will be the first city in the nation to have pre-plans in such detail and on such a wide scale." Actually, as readers of NFPA FIREMEN are well aware, pre-fire planning is nothing new. It has been practiced by outstanding fire departments, large and small, for a number of years. Large cities that have done a notable job in this area include Memphis, Los Angeles, Seattle, and Tulsa, to mention just a few. We applaud when a city, large or small, catches up with a good idea to improve service and the quality of protection but we sometimes wonder why it is necessary to claim to be the "first in nation" with each accomplishment. Doing a good job of protecting the lives and property of its own citizens should be justification enough.

●

Midland, Michigan, was reported to have suffered its worst fire loss in history on April 26. As shown on this month's cover a severe fire involved two mercantile buildings in the downtown district. The fire started in a one- and two-story wood frame, concrete block building, 240 ft. long and 75 ft. wide. Apparently, it burned for about 25 minutes in a stock room on the first floor, then burst quickly into the main area of the first floor. Despite prompt response from the Midland Fire Department, headed by Chief Earl Engwis, and assistance from the Bay City and Saginaw City Fire Departments, this building and an adjacent mercantile structure were destroyed. Altogether, five engine companies and a ladder company responded and four 1½-in. lines and sixteen 2½-in. lines were in use. Absence of sprinkler protection and combustible wood interior construction were factors which contributed to fire spread. The total fire loss was estimated to be $750,000. (*Cover photo by Midland "Daily News."*)

INSPECTIONS?

FIRE PREVENTION?

TRAINING?

VENTILATION?

WHAT IS THE FIRE FIGHTER'S JOB?

by Warren Y. Kimball

JUST what is the fire fighter's job? Most everyone seems to agree that it is to put out fires. Some use a more general term "to save lives and property." But beyond these generalities there does not seem to be very complete agreement on many of the details.

Is it the fireman's job to prevent fires? What about taking care of the apparatus and the stations? How far should we go with salvage work? Is first aid and rescue work a basic fire department job? There are differing opinions regarding many of these matters and we predict that these subjects are going to be discussed more and more in the next few years.

The fire service is generally convinced that the fire department has enough to do without undertaking police work. However, certain fire department members may act somewhat as police officers in enforcing fire prevention laws and regulations. Some volunteer fire departments have "fire-police" for controlling traffic at fires, but police officials are apt to consider this an infringement on the police department's responsibility. (Possibly the solution would be to have such fire-police responsible to the policing agency.)

How much salvage work should the fire department do? Many fire departments try to leave the property as nearly as possible in the condition it was in prior to the fire. Salvage covers are spread, water is removed, windows and roof openings are covered and the premises are ventilated mechanically. Often soot is removed by vacuum cleaners and deodorants are sprayed to remove smoke odors. This tends to reduce the loss to insured and uninsured contents.

But what about various water damage not directly due to fire fighting action? What about broken pipes due to freezing or accident, windows or roofs damaged by storms, or water from automatic sprinkler systems? Should fire companies be detailed to this work? If so, should charges be made when no fire has occurred?

Fire prevention inspection work is another increasing fire department activity. More and more progressive departments are "fighting the fires before they start." In-service inspection tours with fire apparatus are becoming more common and are taking up a considerable portion of the daylight hours of the on-duty force. Many fire officials feel that a good fire prevention program is one of the best answers to persons who would load the fire fighter down with all sorts of outside "extra curricular" jobs. They point to the inspection program and say: "Can't you see we're busy?" However, there is real concern lest the impression arise that fire company district inspections reduce the need for a well-manned fire prevention bureau with full-time people specializing in fire hazard control.

A pretty fair estimate by fire prevention authorities is that, to do a reasonably adequate fire prevention job, the fire prevention bureau staff should approach at least 5 per cent of the number of men assigned to the fire companies. In fact, the more fire prevention work done by the companies, the more people will be needed at headquarters to coordinate and follow up.

Another problem is the matter of checking water supplies. Many fire departments have found that, unless they inspected hydrants on a systematic basis

and took a definite interest in water supply problems, these matters often were not adequately taken care of and fire fighting operations were frequently hampered by faulty hydrants and poor water supplies. Certainly, few places expect the fire department to repair and maintain hydrants unless this work is done by a special bureau in the department, but good modern departments do have a water supply office working with the water department. Often fire companies check hydrants in their districts to see that they are working properly and to familiarize the men with hydrant capacities and flows.

There seems to be little argument that fire training programs are taking more and more of the fire company's time. There is probably little objection to this if the training programs are interesting and worthwhile and cover matters essential to the efficient operation of the department. It is, however, a big factor in use of fire fighters' time. (Probably all would agree that training should never be used as a punitive measure as this would defeat the very purpose which is to enhance efficiency.) Certainly all training, except possibly special voluntary courses given to prepare men for promotion, should be on the department's time. Inspection work also should be done on compensated time either by on-duty men or by men paid as inspectors.

Of course, a major part of fire fighters' time is taken up in care of apparatus and quarters. In most departments the policy is for repairs to be done by specially qualified maintenance men and not by fire company personnel. But the cleaning of apparatus and tools and the care of hose requires many hours of labor. It has always been part of the fireman's work and enables him to make sure that the equipment he is going to use is in good condition.

There is, however, a great deal of difference of opinion over the matter of housework. A few large departments have "matrons" as housekeepers but these are usually paid by assessments against the men using the stations and the matrons are not expected to do any heavy work. No doubt fire fighters inherited the janitor work from the days when it was considered desirable to keep men busy during the long hours on duty. We predict that, with fire fighters working a shorter week, there will be an increasing tendency to provide janitor service, at least in busy metropolitan fire stations. Most police stations have janitors. This work would not require the highly skilled, better paid specialists that fire fighters are tending to become. In many departments, the physical care of buildings, such as painting and repair, is done by men specializing in that work and not by fire fighters.

Another major activity is the rescue service. In many cities, fire departments answer more rescue and other non-fire emergency calls than fire alarms. This is considered to be a "good will builder" for the fire department but it does require more manpower if apparatus is not to be left partially manned. You just don't double the number of emergencies handled without having an increased work load.

One argument that has been advanced for having fire departments do rescue work, salvage work including reduction of water damage, and such other related functions, is that these are emergency operations for which the fire department is particularly adept. It is argued that some agency is going to have to do these jobs in the modern community and that such jobs make the fire department more important in the public eye and justify more fire department personnel. It is reasoned that if there is a separate rescue squad service and a separate salvage service outside of the fire department, these agencies will be getting certain public acclaim and will be getting a share of the municipal dollar that might well be embraced in the fire department budget. On the other hand, there is the problem that all too many fire departments do not have money or men enough for the fire fighting service and to impose additional work loads without additional help or compensation may well be the straw which breaks the camel's back. For example, if fire departments are to run ambulances, men will have to be assigned on each shift and cannot be considered available for fire duty. The chief has to decide if his fire fighting force is adequate before he can assign manpower to other duties.

Yet, something to be considered is this: each time a fire department provides some new type of service to the community, its utility and value to the community is increased. In time, this increase in value is recognized by the taxpayers, by vote for appropriation of new or more funds for fire apparatus, fire stations, pay increases for fire department personnel, or for the addition of much-needed manpower for the department. One fire chief commented on this recently. His department for the past few years has been providing ambulance service to the community and, while this relatively new service has not been much of an additional burden for the fire department, the chief says that in the past year it was one of the primary factors that won voter approval of funds that added more fire fighters to the department and increased salaries.

Ambulance service is of an emergency nature, the same as fire fighting. Thus, it is an effective medium for focusing public attention on the accomplishments of the department. Fire department inspections, fire prevention programs, salvage work, and training are not dramatic, but the public can learn to appreciate their value.

Perhaps the whole problem boils down to the need for continued public relations effort to tell the good job that the fire service is doing and get appropriations needed for proper manpower. In most cases the fire department has few ills that could not be cured by a reasonable amount of money. Make certain that everyone knows the job that your department is doing. The average citizen does not know of the numerous tasks firemen do every day. It has been stated, with some truth, that the modern fire fighter is so busy with his many duties that a fire is almost a rude interruption in the schedule that has been laid out for the day. There is perhaps a parallel with the soldier who is not expected to fight a war every day but has to be fully prepared to fight one. Like the soldier, the fire fighter is not idle on the day when the bell does not strike a signal that calls his particular company. After all: "They also serve who only stand and wait!" And the excitement of a fire is often a welcome relief from much of the drudgery that has so long been part of the job of all paid or volunteer firemen.

Convention registration was handled by this attractive group of ladies under the leadership of NFPA Office Supervisor Beatrice L. Finley (*right*).

A characteristic feature of this 63rd annual meeting was the large attentive audience. Only part of the audience at the first general session is shown here.

Proper han
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Keepers of
Texas and

Highlights of 63rd NFPA Annual Meeting

The Hotels Dennis and Shelburne served as joint headquarters for the 63rd NFPA annual meeting. A total of 1,232 members and guests attended the sessions of the five-day convention, with some of the highlights shown on these pages. In addition to the general business sessions there were meetings of the Fire Marshals' Section, Electrical Section, special sessions on fire prevention education and aviation fire problems as well as entertainment for the ladies.

(Photos by Syd Sloan)

A fascinating demonstration of the fire problems associated with oxygen was presented by A. E. Miller of Scott Aviation Corporation.

(*Right*) George Prussing discussed fire protection of petroleum facilities in the Middle East from whence he has recently returned.

A gala occasion was the Get-Together Party which climaxed the first day of the convention. Nearly seven hundred members and guests enjoyed the convivial atmosphere.

Discussion of the school fire problem by an eight-man symposium drew a "full house" to the meeting of the Fire Marshals' Section.

Proper handling of LP-gas tank truck accidents was discussed by W. D. Cook of Suburban Propane Gas Co., Hugh Keepers of the Fire Prevention & Engineering Bureau of Texas and Los Angeles County Fire Marshal L. A. Dutton.

The original painting of the forthcoming Sparky calendar for 1960 was presented to NFPA General Manager Percy Bugbee by Robert Kappes of Osborne, Kemper, Thomas and Co.

New York City's dynamic fire commissioner Edward F. Cavanagh, Jr. described the big-scale fire prevention program in that city.

Australian member G. Gordon Russell of Wormald Bros. Industries told convention of NFPA influence on fire protection in his country.

This four-man panel discussed extinguisher maintenance. (*Left to right*) C. R. Fredriksen of United Fire Equipment Service Assn., Robert Roos of The Fyr-Fyter Co., T. R. Nichols of the Fire Equipment Mfrs. Assn., and Los Angeles Fire Marshal R. M. Hill (speaking). Past President John A. Neale, seated at right, presided.

The British Institution of Fire Engineers, described by Honorary Secretary, A. P. L. Sullivan of London, was of interest for fire service personnel in the Second General Session.

(Left) Modern salvage methods were described during the Second General Session by Fred W. Kempf, chief, Chicago Insurance Patrol.

(Right) Small windows in dwellings are dangerous if fire starts. Studying such windows in a typical modern home are Robert T. Palmer, chief, Fire Prevention Bureau, Minneapolis; Raymond M. Hill, Fire Marshal of Los Angeles; Percy Bugbee; Edward L. Hanlon, chief fire officer, Port-of-Spain, Trinidad.

THE LATEST WORD ON

FOAMING RUNWAYS for CRASH PROTECTION!

At Olathe Naval Air Station near Kansas City, Kansas, this TWA Super Constellation had to make a wheels-up landing on January 17. Since the right landing gear could not be extended and locked properly, the pilot, after communications with the airport, circled for three hours to use up the fuel supply. A foam truck from Kansas City, an O-10 and an O-11 crash truck from Richards-Gebaur Air Force Base and a Navy Type MB-1 truck worked to lay a foam blanket about 4 inches deep, 125 feet wide on 4,000 feet of runway. The plane touched down at about 100 knots speed, then slid to a safe stop. Twenty-eight passengers and five crew members walked away unhurt. Plane had slight damage. (*Wide World photo.*)

THE March, 1958, issue of FIREMEN magazine fe tured an article describing the procedures for foa ing airport runways for aircraft crash protection. It r ported three incidents in which foam had been appli to runways and aircraft made successful crash landing However, the article pointed out that, in general, e perience indicated only that some foam laying oper tions brought good results while some did not.

During the past year, the NFPA Committee Aviation has given a great deal of study to the tec niques of foaming runways and to the experience th has resulted from actual crash incidents. The proble was discussed during the Aviation Session at the rece NFPA Annual Meeting in Atlantic City. Now t Committee has issued an important new statement the subject in Aviation Bulletin No. 232.

Excerpts from that bulletin are contained in the b at upper right. In general, the Committee feels th foaming of runways has not been *proved* effective as means for minimizing impact damage to an aircraft reducing the likelihood of fire after impact. The bull tin points out that there are four possible benefits fro foaming of runways:

That the foam will reduce the extent of damage the aircraft in a forced landing.

That a foam coated runway permits slippage, redu ing the deceleration forces on the aircraft and its occ pants, or its ground looping tendencies.

That the foam will reduce the friction spark hazar on certain dry runways.

That the foam coated runway will reduce the exte of fire hazard in event of a fuel spill.

In analyzing these possible benefits, the NFPA Se tional Committee on Aircraft Rescue and Fire Fightin came to these conclusions:

1. A number of aircraft have made emergency lan ings on foam coated runways with minimum damag The incidents, however, did not prove that the damag would have been appreciably greater had no foam be used. Controlled emergency landings were also co pleted on dry runways with relatively minor damag

2. From what is known to date, no significant effec on the normal braking of aircraft result from the use foam on runway surfaces.

3. A foam coated runway will have no appreciab effect on the fire hazard of a fuel spill on top of the foa blanket. Effective use of foam requires applicatio over a flammable liquids spill; fuel spilled on top of foam blanket can be ignited by an exterior source.

As pointed out in the article in the March, 195 issue of FIREMEN magazine, there are other consider tions that need to be evaluated in determining th feasibility of foaming runways for crash protectio These include the actual nature of the aircraft eme gency, the amount of time available for producing a distributing the foam covering, the foam-maki capability of the equipment available on the airpor the effect the foam-laying and clean-up operations w have on general aircraft movements at the airport, t temperature conditions, the length and condition of t runway, etc.

- **Foaming of runways for crash protection is not of proven value as a means of mitigating the extent of damage to an aircraft making a wheels-up landing nor is it of proven value as a means of reducing the likelihood of fire following impact.**

- **Foaming of runways for crash protection has been advanced significantly by the publicity given to a number of isolated incidents, by television and newspaper glorification of the technique and by the psychological and theoretical advantages which the technique seems to inspire.**

- **Unfortunately, it has not been possible to date to conduct comprehensive tests realistically simulating aircraft belly landings on runways coated with foam.**

- **To date, no incident has occurred where foaming of the runways has increased the extent of damages so about all that can be said is that, under favorable conditions, foaming of the runway should not result in greater aircraft impact damages.**

- **A conclusive research program should establish with certainty whether foam on various types of runway surfaces will actually reduce the friction spark hazard. However, evidence to date indicates that on a foam coated runway friction sparks may still occur. If fuel vapors are present in the area where such sparks are generated and if the sparks are of sufficient magnitude and duration, the hazard would therefore still exist.**

- **. . . it can be seen that the technique is a questionable one and that further technical knowledge is essential before complete reliance may be placed on the theoretical values involved.**

- **Initiation of a request to foam a runway for any given flight emergency situation should be a flight operational decision. The request to take such action should thus come from the pilot in command of the aircraft or the aircraft operator, assuming that they are familiar with the aforementioned considerations. Final determination as to the feasibility of actually applying foam to a runway, however, is a decision which the airport manager or his representative (the Chief of the Airport Fire Department) must make after receipt of the official request for such services from the pilot or operator and an evaluation of the fire protection and other airport operational problems involved.**

- **Under no conditions should a foam protective blanket be applied to a runway surface if time limitations or physical conditions would prevent all available aircraft rescue and fire fighting vehicles from being fully operational at time of the actual touchdown with an adequate supply of foam concentrate available to use the vehicles to their full capacity.**

Initiation of a request to foam a runway should be a flight operational decision, that is, it should come from the pilot or operator of the aircraft. The determination of whether foam can be applied effectively with the amount of equipment and time available should rest with the airport manager or possibly with the chief of the airport fire department, after request is made by the pilot and after evaluating all the fire protection and the airport operational problems involved.

If the decision is made to foam a runway here are some of the recommendations made by the Committee in the bulletin.

1. That direct radio contact be maintained between the ground crews laying the foam and the pilot of the aircraft.

2. That, where possible, auxiliary tank trucks lay the foam blanket rather than the primary aircraft rescue and fire fighting vehicle (which should be kept operational for the longest possible period of time).

3. That pre-planning be made of foam-laying operations and vehicle re-load requirements. Under any condition, adequate extra quantities of foam compound must be made available for rapid vehicle reservicing. Under no conditions should a foam blanket be applied to a runway surface if lack of time or physical conditions prevent all available aircraft rescue and fire fighting vehicles from being fully operational at the time of actual touchdown of the aircraft.

4. That the location of the foamed runway surface be determined by the recommendation of the aircraft pilot.

5. If the pilot cannot distinguish where the foam is on the runway, a reference point must be established so that he can get his aircraft into proper position for landing.

6. After foam-laying operations, aircraft fire crews should take standby position out of range of the approaching aircraft. After the plane touches down, rescue and fire fighting vehicles should follow the aircraft and be ready to operate.

7. All unnecessary people should be kept clear of the area until all rescue and fire fighting operations are completed.

8. The length, width and depth of the foam pattern will vary with the type of emergency and other factors. In general, though, for each 100 gallons of foam liquid expanded with approximately 2,000 gallons of water, it should be possible to cover approximately 20,000 square feet of runway surface with a foam blanket which might average 2 in. in depth. For a malfunctioning main gear or wheels-up landing, the runway foam pattern should be at least as wide as the distance between the outboard engines of the aircraft plus 10 ft. on each side. For this type of emergency, the foam pattern should be laid down the center line of the runway and should run continuously the full length of the anticipated slide of the aircraft.

THE Schuylkill County Volunteer Firemen's Association is one of the largest, progressive organizations of its kind in the Commonwealth of Pennsylvania. Situated in the heart of the anthracite belt in the central eastern region of the Commonwealth, Schuylkill County has about 200,000 population.

Since May 15, 1955, when representatives of 40 fire companies met at Tamaqua, Pennsylvania, and voted to organize a county association, the membership of the Association has more than doubled. Now it includes 95 fire companies and firemen's relief associations.

Among the association's major accomplishments during its first 45 months are: four county conventions; two successful county fire schools; and an active fire prevention program.

Realizing the value of good public relations, the firemen stress a spirit of friendly helpfulness when they visit churches, schools, hospitals and other buildings to conduct the safety surveys. They emphasize that they want to avoid creating any hardships for property owners and tenants, and that their only concern is the safety of property and life.

School Safety

The fire prevention program target for September is Safety in Schools. Consequently, shortly after the Schuylkill County schools opened for the 1958–59 term last September, a concentrated survey of every building was conducted by the firemen with the cooperation of school authorities. Numerous hazards were pinpointed in these inspections.

Fire Prevention in Schuylkill County

From a report by L. E. Shingledecker, Supervisor of Fire Safety, Nationwide Insurance Company

Fire Prevention

The fire prevention program was initiated for the county in January, 1958, and operates all year.

The firemen concentrate on a different category of fire safety each month. For instance, January is devoted to inspection of churches and hospitals and special instructions for baby sitters; February spotlights safety in service stations with precautions on use of "The Terrible Twins," kerosene and gasoline; March brings a drive to improve safety in industrial buildings. Other months bring different campaigns.

In promoting the year-round program, the Schuylkill County firemen, fondly dubbed "coal-crackers" by firemen outside the anthracite area, developed the "CHESS" formula — *Cooperation*, *Hard Work*, *Enthusiasm*, *Sincerity*, *Sacrifice*.

The Nationwide Insurance Company supplies information, circulars, inspection blanks and other material used by the firemen to conduct safety surveys. This material is shipped monthly to Tamaqua, where Charles Wink, chairman of the Fire Prevention Committee, handles distribution to individual units in the eastern sector of the county; and to Pottsville, where Robert Scheipe, a councilman and Director of Fire Safety in that city, does likewise in the western sector. The entire project is on a volunteer basis.

The important job of publicizing the fire prevention activity and keeping the public informed about fire safety is coordinated by one man, who dispatches news releases monthly to the county's five daily and three weekly newspapers. Handling this job is Bill O'Brien, a reporter for the Shenandoah Evening *Herald* and chairman of the Association's publicity committee.

L. E. Shingledecker
Supervisor

Chief John V. Snyder
Director

Despite having had these hazards pointed out to them, some school officials lagged in correcting them. Then came that terrible school fire tragedy in Chicago last December. The Pennsylvania Department of Public Instruction is now conducting an intense survey of every school building under its jurisdiction, and in numerous instances, has ordered buildings corrected or closed for the same type hazards which Schuylkill County firemen uncovered in September.

The following men are responsible for introducing the fire prevention program in Schuylkill County: Captain Lawrence L. Priar, who is also State Fire Marshal of Pennsylvania; Robert Knight, special agent attached to the Arson Department of the Fire Underwriters' office at Harrisburg; L. E. Shingledecker,

representative of the Nationwide Insurance Company, Columbus; and John V. Snyder, fire chief of the Schuylkill County Borough of Ashland.

Priar and Knight were the "contact" men and have been closely associated with the Schuylkill County Association since it was formed. They were aware that similar year-round fire prevention programs had been launched in counties in Maryland, Ohio, West Virginia and North Carolina, so they contacted Shingledecker.

A meeting of the Schuylkill County Association's officers and Fire Prevention Committee was arranged for the Good Will Hose Company in Frackville, in December, 1957, at which time the plan was explained. The firemen, assured by Chief Snyder that it would be of tremendous value, agreed to get the program started.

Recently, Shingledecker suggested that the firemen expand their program of activities with a county-wide firemen's seminar. This met with favorable response and the seminar was held May 16 in Pottsville.

Fire School

The annual fire school conducted by the Association in September commands a great deal of interest and enthusiasm. This project was started two years ago, and attendance has averaged 325 men. The fire schools are held at Lakewood Park, one of the state's summer recreation spots. The facilities include a giant ballroom for assemblies and indoor classes; a lake for fire stream demonstrations; a permanent "smoke house" where mask instructions are held; tall buildings on which ladders and rescue techniques are practiced; spacious fields on problem fires, such as fuel oil, rubber and automobiles. Use of the park is granted free by the owners, the Guinan family of Mahanoy City.

During the first two years, the fire school curriculum was confined to basic subjects such as hose and ladder evolutions, problem fires, masks, pumper training, rescue, tools and ropes. Last year a special advanced course in first aid was added with expert instructors provided without cost by the U. S. Bureau of Mines in Wilkes-Barre.

A committee, headed by veteran Tamaqua fireman Frank Behr, helped get money to buy the necessary equipment and materials for the new school and each man who enrolled was assessed one dollar. Since the school is now well organized, the committee has secured an annual grant of $500 from the county commissioners for the project, and is seeking financial assistance through Civil Defense appropriations.

The complicated job of directing the fire school since its establishment is being handled by Chief John Snyder of Ashland. His first assistant is Mike Gordon, representative of a Philadelphia sales firm.

Professional firemen from metropolitan departments instruct at the county fire school; all are certified State Fire School instructors, as is Chief Snyder.

Volunteers from the Schuylkill County Chapter of the Pennsylvania State Fire Police direct traffic and guide the crowds who come to watch the training.

Began at Tamaqua

The records of George L. Meredith of Tamaqua, first and only secretary of the Association, indicate that in October, 1954, a committee from the Citizens Fire Company of Tamaqua was appointed to confer

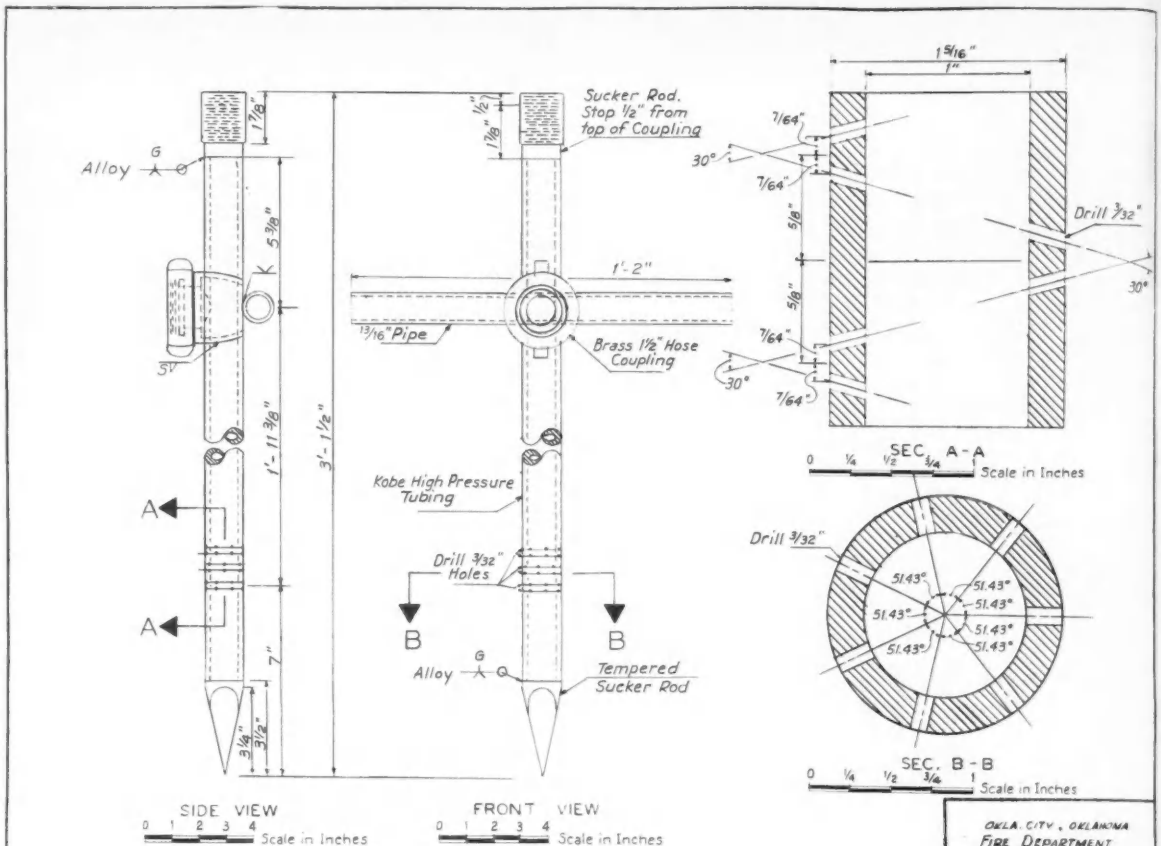
Schuylkill County Volunteer Firemen's Association Officers for 1958-59: (Front row) Paul Hinnershitz, Schuylkill Haven, financial secretary; Rev. Henry Krzesinski, Shenandoah, chaplain; Adam Balkiewicz, Jr., Shenandoah, president; Wilfred Wachter, Pottsville, treasurer; George L. Meredith, Tamaqua, secretary. (Back row) John Clemson, Tamaqua, committee member; Charles Wink, Tamaqua, fire prevention chairman; Stanley Kaleda, Shenandoah, trustee; John Eltringham, Mahanoy City, trustee; Andrew Yesalusky, Frackville, past president; Peter Mahalage, Mahanoy City, past president; Joseph Mulligan, trustee.

on the matter of a new association with the other three Tamaqua companies. This resulted in the formation of a committee composed of members from all the Tamaqua companies, and this committee sent out "feeler" letters to all companies in Schuylkill County in February, 1955. Seventy-five replies came in, most of them favorable to the idea. The movement jelled on May 15, 1955, when 40 companies sent representatives to a meeting at the East End Company in Tamaqua and voted to establish the new association.

State Fire Marshal Captain Lawrence L. Priar of the Pennsylvania State Police

As stated in its constitution, the purpose of the Schuylkill County Volunteer Firemen's Association is "general improvement of the volunteer fire service . . . to promote the welfare of the volunteer fire companies . . . improve service as firemen . . . create feeling of good will and fellowship among companies." Meetings are held quarterly in different communities. Average turnout exceeds 300 fire company members.

During 1959 the Schuylkill County group will continue to play the game of chess for fire prevention. The fire department members will take the part of the Pawns; the fire chiefs will be the Bishops; Knight and Priar will be the Knights; Scheipe and Snyder the Rooks; and NFPA Pamphlet 616M–P — "Rural Fire Department's Program of Pre-Fire Planning and Fire Prevention" will serve the group as the Queen. Of course, all protect the community which is the King.



"PUNCTURE" NOZZLE FOR CELLAR PIPE

GEORGE R. McALPINE, retired chief of the Oklahoma City, Oklahoma, Fire Department, recently submitted to FIREMEN magazine the above drawing. It shows the characteristics of the "puncture" nozzle which Chief McAlpine designed and made in the fire department shop. It is used principally to penetrate wood, concrete or metal flooring so that water can be used in fire attack on the floor below such as a cellar.

The chief reports that the best operation is obtained when the nozzle is supplied by a 1½-in. fire hose and operated at 75 pounds nozzle pressure. Then the nozzle will discharge approximately 75 gpm and cover a 35 foot diameter. Two years ago in Oklahoma City the nozzle was used very successfully in attacking a basement fire of a mercantile building. This was a multiple-alarm fire in which the heat had built up in the basement to such an extent that fire fighters could not enter. Three of these nozzles were driven through the concrete base of the first floor approximately 10-ft. apart. When water was applied through 3/32-in. diameter holes drilled in the nozzles as shown in the sketch above, the fire was knocked down and within ten minutes men could enter the basement for extinguishment.

The Kobe hydraulic pipe, specified for the nozzle valve, is widely used in oil fields in Oklahoma. Chief McAlpine reports that a "Polish" rod, also used for oil drilling, can be utilized on the nozzle. This rod varies from ¾-in. to 1½-in. diameter, but for the nozzle, the 1¼-in. OD size is used since it has an interior diameter of 1-in. The chief states that this type of rod will not collapse under the pressure of hammering. He reports that the fire departments in Tulsa and Enid, Oklahoma, have also adopted the nozzle for use in fire fighting operations.

Rescue Unit Built by Fire Fighters

AN INTERESTING rescue truck is operated by Chief Carrol E. Chittock's fire department in Turlock, California. Built by the paid and volunteer fire fighters for slightly more than $2500, the vehicle has been proved very useful for the twelve-man rescue squad established by the fire department five years ago. Much of the equipment was donated by private individuals and organizations but the truck was designed and constructed by the firemen during some 4,000 man-hours of work.

Actually, since the truck was put in service in 1954, the rescue squad is reported to have saved at least 28 lives. In addition to operating in Turlock, a city of approximately 7,000 population, the squad also provides mutual aid to outlying areas and at least three lives have been saved so far on such "outside assignments." Captain John Berlau is head of the twelve-man rescue squad and supervises the training.

Captain John Berlau, head of the rescue squad, is assisted with skin-diving apparatus.

All members now hold advanced first-aid cards.

The squad holds regular drills at least twice a month which include both practical and classroom instruction. In addition, the regular fire fighters have four resuscitator practice sessions each month.

A listing of the equipment carried by the truck is shown below.

Inventory of Equipment

Front mount manual winch (3/8-in. metal cable, 100-ft. long).

Electronic siren and loudspeaker

"Aqua-lung" with spare tank, equipped with fins and goggles.

Emerson resuscitator equipped for use on four victims simultaneously.

Complete first-aid kit.

Cutting torch unit.

Set of grappling hooks.

Two M.S.A. "Chemox" masks.

Two canister type (all purpose) masks.

Two asbestos fire suits.

Case of splints. (Various sizes.)

Case containing spare oxygen bottles and four wool blankets.

Case containing electrical equipment. (Extension cords, fuses, etc.)

Four salvage covers.

Case of stimulants.

Case of small hand tools.

110 volt power plant with a 270-ft. live line and a multiple receptacle box with standard and lock type receptacles. (Mounted on a portable cart.)

One stretcher equipped with a wool blanket.

Five gallon can of gasoline (auxiliary).

Two gallon can of oil (auxiliary).

One pressure-type portable drinking fountain (mounted inside rear door).

One 20 pound dry CO_2 extinguisher.

One 15 pound CO_2 extinguisher. (U. S. Navy.)

A Granco power take-off pump with 150-ft. 1-in. high pressure line and Hardy fog nozzle.

100 gallons of water. (Two tanks in series.)

Four portable floodlights, 150 watts each. One motor-driven floodlight mounted on top of unit. (250 watt, 12 volt airplane landing light.)

General Electric 3-way radio.

Two 9-volt hand lanterns.

One blinker-type emergency hand lantern, red.

One half-ring traction splint for leg.

One five-ton hydraulic jack.

One ten-ton hydraulic jack.

One 16-ft. extension ladder.

100-ft. 3/4-in. rope

50-ft. heavy duty chain.

One asbestos fire blanket.

Two push brooms.

Two house-type brooms.

Two heavy duty mops.

Two squeegees.

One eight pound sledge.

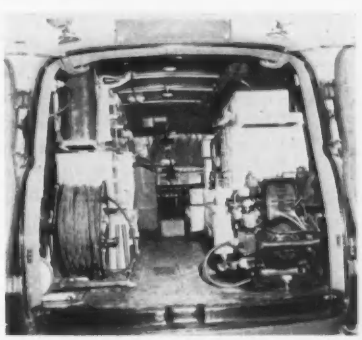
Two shovels.

One set of "come-a-long" block and tackle.

One "Skil Saw" with all-purpose blade.

One saber saw.

One 15-ft. section of 2 1/2-in. fire hose for filling water tank.



Interior of the one-ton converted panel truck holds lifesaving emergency equipment.

Here is a type of "curtain" fall which drops wall materials straight down. Part of this wall landed inside the building, the rest fell on the sidewalk. (*Wide World photo.*)

THINGS TO CONSIDER ABOUT

BUILDING COLLAPSE

From a report prepared for the NFPA Fire Service Training Committee by Charles L. Roblee, Fire Training Instructor, Public Safety Institute, Purdue University.

FIRE fighters often must move into places where they risk injury or death from collapsing buildings. We are accustomed to reading such headlines as "Eight Firemen Trapped When Wall Collapses," "Four Firemen Trapped as Floor Gives Way," "Three Firemen Die as Walls Fall." These dangerous situations need careful study by the fire service. In particular, let's consider four fundamental aspects of the problem and decide what can be done to give greater protection to the fire fighter.

What are some of the causes of structural failure?

What are the characteristics which may indicate structural weaknesses in buildings?

What are the warning signs of potential wall or structural failure?

What is the officer's duty or responsibility to his men?

Causes of Structural Failure

Generally, here are some of the causes of structural failure.

Burning out of floor joists — When floor joists burn out there may be nothing left to hold the walls in place.

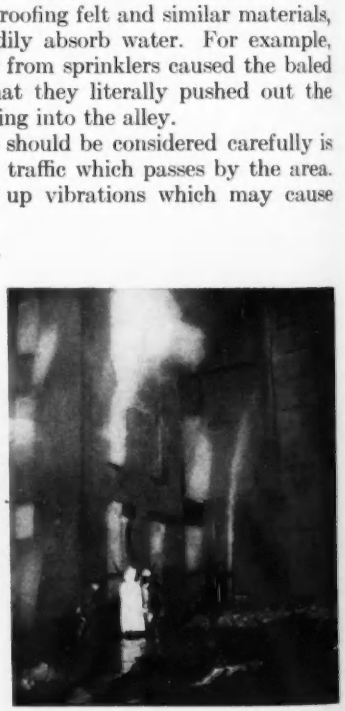
Internal explosions — There are several types of internal explosions known to the fire service — the most common being that known as "back draft," usually preceded by a sudden calm or sucking in of air. It occurs when superheated gases are suddenly mixed with sufficient oxygen, with a severe "explosion" following. Other internal explosions may be the result of fire involving chemicals or other materials. Any internal explosion may develop enough force to push out a wall.

The destruction of "tie ins" — The burning or breaking of studs or rafters will destroy the support of floors and roofs and may have the same result as burned out floor joists.

Exterior attachments may affect the stability of a wall. These include marquees, large signs and even fire escapes. Another important point is just how these exterior attachments are tied into the wall. We must not overlook bric-a-brac, heavy cornices, or "gingerbread" found on the front of many old buildings.

Expansion of the contents of a building due to water from fire streams may also push a wall out. This sometimes happens with baled or stacked material such as paper, cloth, rags, roofing felt and similar materials, all of which will readily absorb water. For example, in one building water from sprinklers caused the baled rags to expand so that they literally pushed out the back end of the building into the alley.

Another point that should be considered carefully is the amount of heavy traffic which passes by the area. Does this traffic set up vibrations which may cause structural failure?



Chief officer watches building as men operate hand line. Part of structure has already fallen into street. Here is the kind of situation that calls for careful positioning of men and equipment, with preparation for quick withdrawal. (*Photo by Providence, Rhode Island, Fire Department.*)

Characteristics of Possible Structural Weakness

Stars or plates on a brick building may indicate that there have been previous structural faults and that repair has been made by placing tie rods (of wrought iron or steel) into the joists to hold the wall in place. However, a number of years ago a method of construction was to tie joists and rafters into the walls by such rods and to secure the tie rods on the outside wall with stars. The age and appearance of the building sometimes will show whether it was original design or a result of repairs made to the structure. If it is the latter, there will be nothing left to hold that wall from falling if the joists burn out.

Cracks in the wall, bad mortar and brick conditions are other signs of structural weakness.

Warning Signs

Dropping bits of mortar indicate the deterioration of the mortar from heat and water. When this occurs, fire fighters should be extemely careful since the walls are weakening rapidly.

Cracks in walls should be watched carefully during fire fighting operations. If it appears that the cracks are expanding, steps should be taken to protect personnel in that vicinity. In a recent fire a crack appeared in a hollow block parapet on top of an 8-in. brick wall. The first wall movement occurred at the point where the crack was later seen in photos taken at the time of the fire. The intense smoke hid the defect from view until the wall movement started. One fire fighter was killed and several others injured.

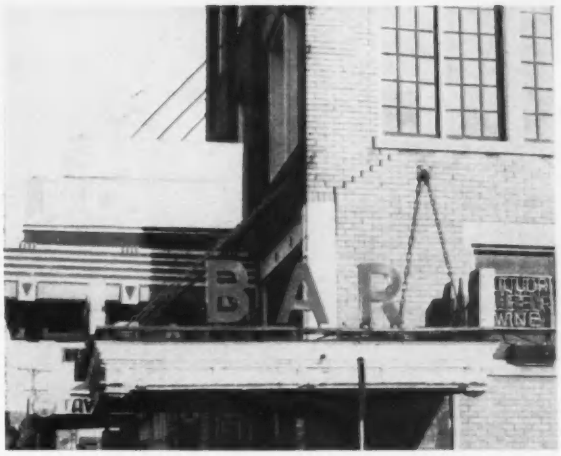
Bulging may be expected to occur when one side of a wall is hot and the other cold, when a floor expands, or unprotected steel expands from the heat of the fire.

A swaying wall usually indicates a roof has fallen or is just about destroyed. We generally find that there are three cycles or more in this swaying action, that is, three or more sways. However, if there is a definite pause in a given sway, the wall will probably fall from that position.

Dense smoke escaping under pressure through the mortar joints of a solid brick wall indicates trouble is not far off.

Walls may fall out or they may fall in, and we also have what is known as a curtain fall, that is, the wall drops straight down.

When walls fall, they sometimes kick out at that point where they break off and slide or fall outwards into the street. Curtain falls occur particularly when there are large window areas, such as the front of a building. This type of fall drops materials, bricks and debris almost straight down and may cover the entire sidewalk.



Marquees, large signs and other attachments to exterior walls of buildings can prove hazardous when fire occurs. Note in right center of this picture that separation has occurred in the brick facing.

Warning of impending explosions in small or frame buildings may be indicated by a puffing of the smoke. This puffing also indicates that there is insufficient ventilation, or that fire has reached flammable liquids or chemicals.

The Officer's Responsibility

A fire officer's responsibility is to see that, in every case when serious fire damage has occurred to a structure, some responsible individual is in a position to align the wall within his "line of sight" and be able to determine whether any bulging, sagging, or other movement takes place in the wall.

Such an important job requires an officer of the fire department, preferably a chief officer, or the training officer.

Another responsibility of the fire officer is to see that each man has been alerted for quick withdrawal when there is a possibility of structural collapse. It may be advisable to relocate men, hose lines and possibly apparatus to give them as much protection as possible. It is well to consider a program of preparation and training to prevent these situations from occurring. For years, we in the fire service have advocated fire drill training for the evacuation of public buildings such as schools and theaters. Why not train fire fighters to leave a dangerous area in orderly retreat?

The small fire department usually has a limited amount of hose available, and this training of orderly retreat should include the proper sizing-up of a fire. When the fire is evaluated properly and layouts are made, it should be possible to cut in at any point within those layouts with a hose clamp and set up emergency or covering lines.

Any fire officer who has witnessed the collapse of a building, or similar emergency, knows that confusion reigns within a minute or so after such an incident. It is at this time that the quality of planning and training become of major importance.

Fire fighters standing on the roof or floors of this building would not have much chance when the collapse came. It was reported that expansion of the contents by water was a factor in the collapse of this structure. (Photo by Charles L. Roblee.)

Dense smoke escaping under pressure through the mortar joints of a solid brick wall indicates trouble is not far off. This picture shows the wall where this particular situation occurred. The Assistant Chief in Charge of Training observed the warning sign. He ordered the men in the passageway to abandon their lines and positions. In less than a minute the abandoned lines were completely buried by the rubble shown in the picture. (*Photo by Milwaukee Fire Department.*)

Many times sounds may precede a wall collapse, but most of the time with the noise of a fire and the confusion of noise and activity on the fire ground, these sounds are not heard. However, when that first movement occurs, fire fighters should be trained to shut off the nozzle, *drop their lines and move* as fast as possible to a safe place. Other fire fighters who suspect danger should report such information to the "safety officer." Every man on the job must keep alert for such possible trouble.

When walls begin to sway or fall, the building is in all probability hopelessly involved. There is no reason to expose men to the danger any more, except as necessary to prevent the spread of fire. Actually, master streams should be set up whenever enough fire damage has occurred to a structure so that it is necessary to place somebody "on the wall." Again we come back to that fundamental and basic point that we must train in order to take care of these emergencies.

Roof Collapse

Another hazard we encounter in fire fighting is that of roof collapse. Two warning signs are: the spongy feeling of the roof, which indicates that the rafters or roof supports are burned out, and secondly, the rocking or breathing of the roof.

When a roof begins to rock, roll or breathe it indicates two very important things: (1) that a tremendous amount of heat and pressure is building up from below due to insufficient ventilation and (2) that there is an extremely rapid spreading of fire.

Immediate evacuation under these conditions is imperative. The safe time element must be measured in *seconds*, not in minutes.

In connection with roof collapse, we should also consider roof construction. Many roofs of shed construction are designed only for weather loads and may not stand the weight of hose men concentrated on one spot.

The effect of a hot fire on a trussed roof is interesting. When the lower chord of a wood truss burns out, the truss fails; when a large steel truss is heated the truss expands and literally pushes the walls out. The possibility of wall collapse because of wood truss failure appears to depend upon the distance between each truss, that is, the greater the distance between the individual trusses in a building, the more likely that a failure of a single truss will cause wall collapse. In any event the destruction of the lower chord of a wood truss throws a great deal of strain upon the wall at either end.

Floor Failure

Floor failure usually follows the destruction of floor joists. Some time ago an explosion occurred in a boiler in the basement of a two-story brick office building causing the roof and second floor to collapse on the first which fell into the basement. Another fire occurred in a two-story brick building with precast concrete floors. There was considerable storage of knocked down corrugated cardboard boxes on the second floor. Fire department lines had been throwing water in this area for approximately one-half hour, when the chief of the department observed the floor beginning to sag. He rushed upstairs to evacuate his company, but arrived just in time to "ride down" with them. Fortunately, only one man had to remain hospitalized overnight. He had a sprained back. The rest of the men suffered minor bruises and burns.

One case of floor collapse occurred in Chicago on St. Patrick's Day a few years ago. The building was a three-story, ordinary brick-joisted structure originally designed for mercantile occupancies on the first floor and dwellings on the second and third. The character of the neighborhood changed and it was decided to convert the second floor into a large recreation area with pool tables and card tables and the third floor to a dance hall. The original building had a number of brick division walls running from the foundation up to the roof and serving as a support for the floor joists. To obtain an open area on the second and third floors, these division walls were removed at the second floor level and replaced by cast-iron columns and steel beams. It so happened that one of these cast-iron columns, upon being placed on top of the old wall at the second floor level, came directly over an old chimney. This did not particularly bother those in charge of remodeling. They placed a steel plate over the chimney. This plate barely spanned the opening, but they rested the column on top of it.

On St. Patrick's night three hundred persons began to dance on the third floor. The vibrations caused the plate to move and the column dropped down the chimney. This let the third floor down in the middle, and, of course, removed the supports for the roof as well. Of more than three hundred persons trapped in the debris only one was killed. The Chicago Fire Department did an excellent job of rescue.

It is, however, very disturbing to speculate on how many similar conditions may exist. It will take only the right set of circumstances to precipitate a disaster. To recognize these various conditions and acquaint the members of the department with them remains the duty of each fire department inspector.

Booklet on Home Inspection

A NEW booklet, "Home Inspections by Fire Departments" has just been released by the Federation of Mutual Fire Insurance Companies, Chicago, Illinois. It was prepared to give fire departments some practical information on conducting home inspections.

The booklet describes the inspection programs of a number of fire departments, outlining the step-by-step procedure. In addition, "how-to-do-it" examples are given to help fire fighters correct hazards.

One copy of the new booklet is being mailed to every fire chief whose town has a population of more than 2,500. Fire departments can get additional copies by writing to the Federation of Mutual Fire Insurance Companies, 20 North Wacker Drive, Chicago, Illinois. Any other interested persons can get single copies of the manual upon request to the Federation.

Ray Hyde Retires

RAY K. HYDE, manager, advertising and publicity, for ADT, has announced his retirement effective June 1 after 38 years of activity including sales engineer, and editor of the ADT *Transmitter*. Since January, 1953, Ray has served as secretary to the NFPA Public Relations Committee.

Mr. J. J. Caffrey, ADT sales promotion manager, will take over the position of advertising and publicity manager.

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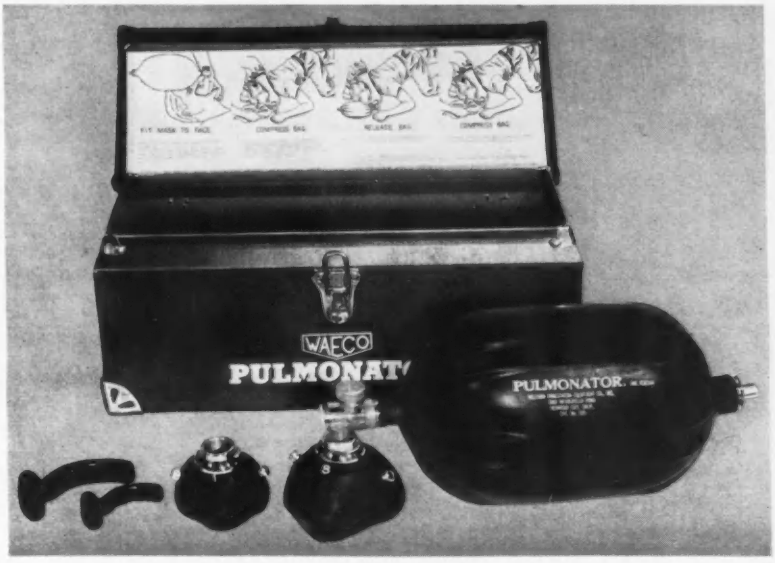

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Write for Catalog 360 showing everything a fireman needs for his personal equipment — together with Department Record Books, Secretary's Books, and printed forms.

CAIRNS & BRO., INC. — Allwood, Clifton, N. J.

SINCE 1836

Changes in the Baltimore Fire Department

WHOLESALE changes in the top echelon of the Baltimore City Fire Department have resulted from a series of retirements.

Heading the list of promotions is that of John J. Killen to chief of fire department. Chief Killen took the place vacated by the retirement of Chief Michael H. Lotz who headed the department since 1950.

Chief Killen is a veteran of 21 years in the fire department and had been a deputy chief since 1956. He is 51 years of age and the father of five children. He headed a City Service competitive examination list for the post scoring a higher grade than three other deputies, who also took the examination.

John J. Killen was promoted to fire lieutenant in 1943, captain in 1946 and battalion chief in 1950. While he was battalion chief he was assigned for most of the period as chief of the Fire Prevention Bureau.

Chief Lotz's retirement was effective on March 24, 1959, but he had been on 90 day retirement leave prior to that time. In the interim, before the naming of Killen, Deputy Chief Charles H. Thiess served as acting chief of the fire department. Chief Thiess did not take the competitive examination for chief of fire department, and has gone on retirement leave at his own request; he will leave the department officially in the Fall.

Two other promotions have filled top vacancies. Battalion Chief Emery J. Kempf has been promoted to deputy chief, and Captain Edward J. Callahan to battalion chief.

Another retirement in the department is that of Physician Frank N. Ogden, who has left after serving since 1925. Also leaving the department is William F. Hilgenberg, who resigned as president of the Board of Fire Commissioners to take the post of State Banking Commissioner.

Members of the two fire department local unions gave a testimonial dinner and dance for Chief Lotz and Dr. Ogden on May 7. In addition, Chief Lotz was honored at a special meeting of the Box 414 Association, at which time he was presented with a watch from the buffs.

Another Sparky "Oscar"

Chief Henry G. Thomas, President of NFPA, recently retired from the Hartford, Connecticut, Fire Department, is shown receiving the Sparky Award, the "Oscar" of fire prevention. NFPA General Manager Percy Bugbee made the presentation at a testimonial dinner in Hartford attended by nearly 900 people. The award is given in recognition of distinguished leadership in fire protection and fire prevention. Chief Thomas is one of only three persons who have received this award since Sparky was originated in 1951. At right is T. Seddon Duke, former president of NFPA and Chairman, NFPA Board of Directors.

NFPA Fall Conference

THE NFPA Fall Conference this year will be held in Des Moines, Iowa, November 11–13. Headquarters for the Conference will be the Hotel Fort Des Moines. More details about the program will be featured in future issues of FIREMEN magazine.

PROPOSAL

Sealed bids will be received by Borough Council of the Borough of Glenolden, Delaware County, Pennsylvania until 8 p.m. D.S.T., Thursday, July 30th, 1959, at a special meeting of Council to be held in the Council Chamber of the Glenolden Library Building, Glenolden, Pennsylvania at which time and place all bids will be publicly opened and read aloud for the sale of one (1) 1941 Seagrave Pumper, semi-cab, 500 G.P.M. with bronze pump equipped with 150 gal. booster tank, one (1) 28 ft. extension ladder and one (1) 14 ft. roof ladder.

This pumper may be inspected at any time in the Fire House of the Glenolden Fire Company No. 1, Glenolden, Pennsylvania at which time a list of equipment supplied with the truck will be furnished to prospective bidders.

A Certified Check or Bid Bond in the amount of $100 payable to the order of the Borough of Glenolden must accompany each proposal.

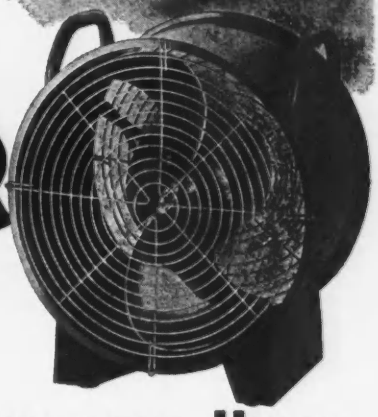
Borough Council reserves the right to reject any or all bids. Address all bids to the undersigned.

H. L. SIMON
Secretary of Council
Glenolden, Pennsylvania

Get smoke out, get air in

with Multi-Purpose

SUPER VAC



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NOT JUST A FAN... but a powerful vacuum-action air screw... Super Vac is amazingly simple in operation, made possible by the efficient design of the **powerful propeller** that is the heart of the unit. This patented propeller produces 100% pulling or blowing power over its entire surface.

Proved method of saving lives while also reducing smoke damage

Fire departments **nation-wide** attest to the speed with which Super Vac provides **controlled ventilation**... so necessary in modern fire fighting. This multi-purpose unit primarily (1) gets rid of smoke and fumes through its powerful vacuum action... or, (2) furnishes a tremendous blast of fresh air into the smoke-congested area, reducing the dangers of combustion and asphyxiation. Although one unit is often sufficient, **complete controlled ventilation** can be more speedily accomplished by using two or more units... one or more units **pulling out the smoke and fumes** while the remaining units **blow in a steady supply of fresh air.**

★ **Highly portable... operates in any position**
★ **Design permits vertical stacking**
★ **Made in 16" and 24" sizes**
★ **AC or DC, regular or explosion-proof motors**
★ **Choice of red or white baked enamel finish**
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For complete details and specifications on

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Pueblo Selects DARLEY Champions** Over All Other Makes****

*City of Pueblo, second largest city in Colorado, elevation 4,690 feet above sea level.

**750 Gallon, 3-stage, Class A Underwriter performance plus 60 gpm at 850 psi for high pressure fog.

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You'll want to know all about our low cost finance plan or combination PURCHASE-RENTAL plan.

New Officers for NFPA

AT THE recent NFPA Annual Meeting last month President Henry G. Thomas, Hartford, Connecticut, was re-elected for a second term, as were Vice Presidents Loren S. Bush, chief engineer, Board of Fire Underwriters of the Pacific; and J. Sharp Queener, manager, Safety and Fire Protection Division, E. I. du Pont de Nemours and Company. Secretary-Treasurer Hovey T. Freeman, president and treasurer, Manufacturers Mutual Fire Insurance Company, who has served in this capacity since 1939, was also re-elected, as was Board Chairman T. Seddon Duke, president, Star Sprinkler Corporation.

Newly elected as directors of the Association were A. Sidney Briggs, manager, Fire Prevention and Engineering Bureau of Texas; Frank J. Fee, Jr., president, Reliable Automatic Sprinkler Company; Elmer 0. Mattocks, director of Technical Services, American Petroleum Institute; Deputy State Fire Marshal Carroll E. Shaw of Connecticut and E. C. Wood, president, Imperial Tobacco Company of Canada, Ltd.

CORRECTION!

The June issue of FIREMEN magazine included a story on a utility vehicle recently purchased by the Tri-State Fire Department near Hinsdale, Illinois. It was incorrectly described as built by Fyr-Fyter Company of Dayton, Ohio. The correct name is Fire Fighter Truck Company, 3148 Fifth Avenue, Rock Island, Illinois.

FIREMEN!

INCREASE YOUR INCOME!

Convert your spare time into steady income selling most popular line of Belts and Buckles with Fireman's personal initials, first name or nickname with miniature replicas of actual fire equipment beautifully enameled, also lapels, tie clasps, key chains, money clips, and cuff links. Excellent repeat business. We furnish you with FREE complete sales kit. Really nice part-time money producing items.

NO INVESTMENT NECESSARY!

For full particulars, write to

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INDIAN

FIRE PUMPS

Way Back

Then Grandpa?"

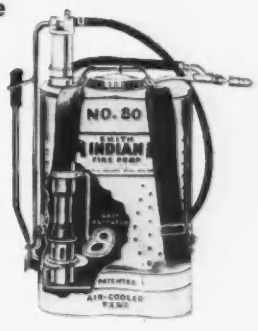
"Yes sirree, Buster, our department had them in 1925 and they're the dangdest best outfits made for small fires. Wouldn't be without 'em. Guess they're better than ever today. I see the boys at the station house still have a bunch of **INDIANS** on hand."

No. 90 INDIAN
Sliding Pump Type

Old-timers know and swear by **INDIAN FIRE PUMPS** — the pioneer back-pack extinguishers that do such a wonderful job with just clear water. Many, many years of research and design experience stands behind every pump.

Both types of INDIAN FIRE PUMPS are approved by UNDERWRITERS' LABORATORIES, INC.

No. 80 INDIAN
Lever Type Pump and Handle



"Nothing Like an INDIAN"

Our **INDIAN FIRE PUMPS** proved to be "worth their weight in gold" only two days after we received them from the Forestry Service. So valuable did they prove that even the boys who were skeptical were immediately "sold" on them.

Wm. "Bucky" Jones
Associate Post Advisor
Post 3, Wise, Virginia

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Onan NEWS REPORT

Onan Standby Electric Plants guarantee power in emergencies

This Onan 10KW emergency electric plant is installed in the community building of *Indian Hills, Ohio.* It not only provides the police department with all the light and power required, but supplies needs of the fire department, too!

When power interruption occurs, the Onan plant starts automatically and supplies current for all essential purposes . . . lights, radio communication, signals, heating system, and other motor-driven equipment.

Dependable Onan emergency electric plants provide electric power for operation of all vital municipal services. In time of disaster, when power interruptions are most likely to occur, emergency power saves lives, protects property, helps to restore and maintain order. Available in sizes from 500 to 200,000 watts; Diesel or gasoline-powered models.

Teletype machines in the Norwalk, Connecticut police department are supplied with power in emergencies by an automatic Onan Standby Plant. Norwalk's 3,500-watt Onan unit also furnishes power for the oil burner, radio, ventilating fans and 60 fluorescent lights.

See your local distributor or write for folder on standby models

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ELECTRIC PLANTS • AIR-COOLED ENGINES • KAB KOOLER • GENERATORS

Onan ELECTRIC PLANTS

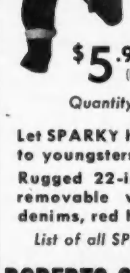
Manual on Forest Fire Control

THE Northeastern Forest Fire Protection Commission recently published an interesting manual outlining the fire fighting methods and techniques for controlling forest fire. Basically, the manual is a collection of training material presented at the annual training sessions of the Commission during the past five years. The compilation is designed as a reference manual for fire control officers and for the training of forest fire control personnel. While many of the described techniques are used principally in New England, New York and adjacent Canadian provinces, the manual contains a number of good suggestions and basic principles which would be practical in other regions.

Chapters cover such items as: forest fire suppression fundamentals, fire behavior, use of aircraft in fire control, use of fire in fire suppression, selection of suppression methods, demobilization, and other topics. An appendix describes the Compact Commission and how it works and contains a number of other useful sections on fire behavior, fire fighting equipment, visual aids and training. Copies of the new manual may be obtained by writing to the Northeastern Forest Fire Protection Commission, State Bank of Albany Building, Chatham, New York. The 364-page, 8½- by 11-in. mimeographed manual is priced at $2.50 per single copy.

Lovable and Durable

SPARKY
THE FIRE DOG
DOLL



THE IDEAL PRIZE OR GIFT FOR YOUR FIRE PREVENTION WEEK CAMPAIGN!

$5.95 add 60c for shipping (In Canada, double shipping charge)

Quantity Prices on Request

Let SPARKY help you sell fire safety to youngsters — and their folks!

Rugged 22-inch quality doll with removable white shirt, tie, blue denims, red hat, boots.

List of all SPARKY items on request

ROBERTS CO. BOX 86D WAYLAND, MASS.

Course on Fire and Arson Investigation

A CORRESPONDENCE course on fire and arson investigation is conducted by the Investigations Institute, 53 West Jackson Boulevard, Chicago 4, Illinois. It is available to fire fighters, policemen, insurance adjusters, members of the armed forces and other persons interested in the subject. It is conducted under the supervision of the Department of Registration and Education in the State of Illinois and is licensed under the Vocational School Act. The Institute is directed by John Kennedy. The course consists of 15 detailed lessons and each enrollee starts with the first lesson and continues with some 500 pages of text material. Questions and assignments are based entirely on information contained in the text. Total cost of the course is $150 which may be reduced to $130 if full payment is made at the time of enrollment.

For detailed information, write to the Investigations Institute, 53 West Jackson Boulevard, Chicago 4, Illinois.

Changing Address?

SUBSCRIBERS to FIREMEN magazine who plan to change address should notify the NFPA Executive Office promptly so they won't miss any issues of the magazine. Fire fighters who receive the magazine through fire chiefs' or fire departments' membership should also include this information when they send notification of their new addresses.

Sparky Goes International

AT THE recent NFPA Annual Meeting in Atlantic City the Sparkys of Middletown, Pennsylvania, posed with the painting of the forthcoming 1960 Sparky calendar. In addition, the youngsters were featured in a five-minute film produced last February by the United States Information Agency. The film will be shown in 40 countries in Europe, Asia and South America.

In Middletown there are now three Sparky companies of more than 30 boys from 7 to 14 years of age. Sponsors of the units are the volunteer officers and men of Middletown's Liberty, Union and Rescue hose companies. The USIA film shows the youngsters in uniform and in training with fire department equipment. Description and explanation of the Sparky program was translated into 22 languages for the overseas audiences.

The HOWE pumper pictured here was manufactured for the community of Carmel, Ind., and will provide adequate, powerful, effective, yet ECONOMICAL, fire protection for that area.

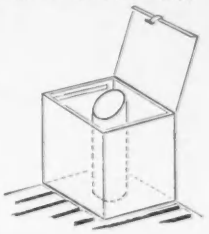
It is a 750 gallon pumper, with a 750 gallon booster tank; has 7 large compartments (4 side, 3 rear) for storage of portable pumps, generators, miscellaneous equipment, coats, etc. Equipped with fully Electro-Matic Waterous Pump, it also has electrically controlled hose reels, and the reel and pump are enclosed in heated compartment to prevent freezing.

Sold by Charles O. Shuman, Anderson, Ind.

ECONOMICAL FIRE PROTECTION and HOWE!

Another FIRST for HOWE! New combination filler, vent, and overflow for Booster Tank . . . . weaving of truck will not cause spill . . . . vented to prevent over-filling or tank bulge due to filling with excessive pressure from hydrant or pump . . . . surge chamber will collect water which would normally overflow during acceleration or deceleration of truck and will return water to tank.

Let HOWE fire apparatus protect you!



'dependable fire apparatus since 1872'

HOWE

HOWE FIRE APPARATUS COMPANY

Dept. VF-39, 1400W.22nd St., Anderson, Ind., U.S.A.

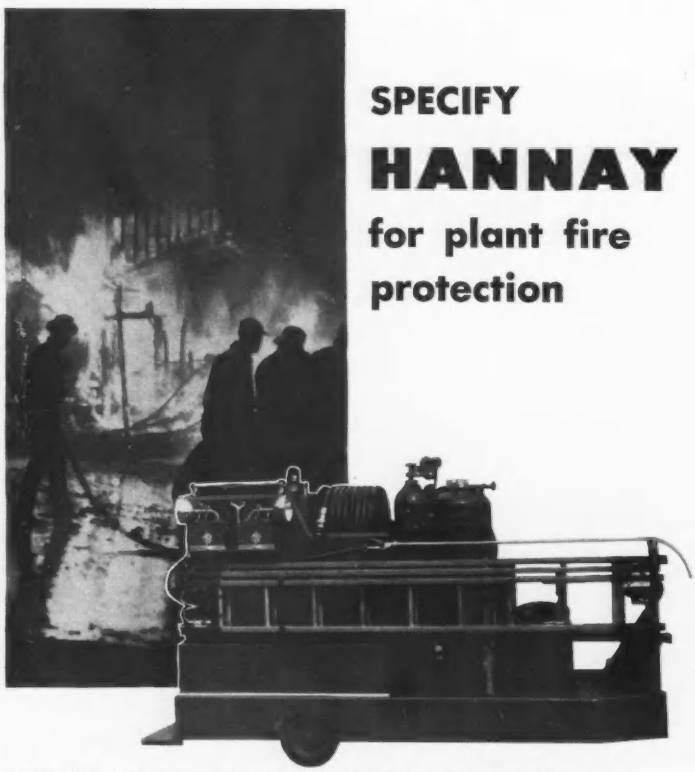
Dates to Remember

Arizona: The Seventh Annual Arizona State Fire Training School will be held in Phoenix, October 15–17 at the Phoenix College. Write to Chief Jake Siken, Training Director, 49 South 1st Street, Phoenix, for information.

Arkansas: Regional fire schools will be held in Booneville, July 20–30; Hope, August 17–27; and Searcy, August 31–September 10. Write to Whit Murphy, Registrar, Arkansas State Fire College, State Education Building, Little Rock.

British Columbia: The Fire Chiefs' Annual Fire College will be held in Burnaby, August 19–21. For more details, write to H. K. Jenns, Supervisor, Traveling Instructional Units, Office of the Fire Marshal, 411 Dunsmuir Street, Vancouver 3.

Florida: The Florida State Fire College in Ocala will feature a seminar in arson detection and investigation August 3–7. Write to W. H. Barnett, Superintendent, Florida State Fire College, Box 785, Ocala.



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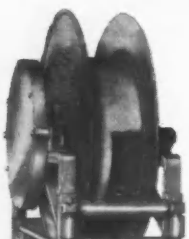
HANNAY REELS PROVIDE WATER, CHEMICAL OR FOAM *AT THE NOZZLE* FOR INSTANT ACTION



From standard fire trucks to portable carts and stationary reels, Hannay offers a complete range of hose reels for industrial fire protection. Hand, spring and electric rewind power in standard or custom built models. Hannay reels are designed and built by active firemen. Specify hose reels by HANNAY.

NEW spring retractable reel for stationary or mobile mounting, provides positive rewind power. Send for complete literature.

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Idaho: The Annual State Fire School will be held August 13–15 in Boise. Write to Earl Robinson, Secretary-Treasurer, 212 South 16th Street, Boise, for further information.

Indiana: The 26th Annual Indiana State Fire School will be held at Purdue University, September 8–12. Write to Professor Shelby Gallien, Director, Public Safety Institute, Purdue University, Lafayette.

Kansas: The 30th Annual Kansas Fire School will be held in Lawrence, October 19–22. For further information, write to Clyde A. Babb, Director, Kansas Fire School, University of Kansas, Lawrence.

Maryland: The Third Annual Aerial Ladder Short Course will be held at the University of Maryland, August 3–5. Write to Robert C. Byrus, Director, Fire Service Extension Department, University of Maryland, Box 85, College Park.

Michigan: The Tenth Annual Michigan Fire Inspectors' Conference is scheduled for September 22–25 at the Michigan State University Kellogg Center in East Lansing. During this time the annual meeting of the Michigan Fire Inspectors' Society will be held. For further details write to Arthur P. Patriarche, Secretary, Michigan Fire Inspectors' Society, 716 Ann Street, East Lansing.

Missouri: The Annual Central Missouri Fire Conference is scheduled for July 24–26 at the University of Missouri. For more information, write to William Bush Walden, Administrative Assistant in Charge of Firemanship Training, University of Missouri, Building T-11, Room 101, Columbia.

New York: The 87th Annual Convention of the Firemen's Association of the State of New York will be held at the Hotel Woodruff, Watertown, August 16–21. For details, write to Secretary Eugene M. Braun, 4025 Main Street, Buffalo 26.

Ontario: The following courses will be given at the 1959 Fire College in Gravenhurst: Company Officers, July 13–24; Administration Course for Senior Officers, August 10–24; and Basic Fire Inspection Practices, August 31–September 4. Write to D. E. Barrett, Director, Ontario Fire College, P.O. Box 830, Gravenhurst.

Pennsylvania: A fire department pump school is scheduled for August 31. Special training courses will be given in ladder, rescue and salvage, July 20 and August 24. Write to Art Espey, Director, Pennsylvania State Firemen's Training School, Box 631, Lewistown.

South Carolina: Regional fire schools will be held in Conway, July 20–24; and Hampton, July 27–31. Write to H. B. Wells, Instructor, Fire Fighter Training, 1539 Harrington Street, Newberry.

Tennessee: The 16th Annual Tennessee State Fire Service School will be held at the Tennessee Fire Training Center in Murfreesboro, August 17–21. Write to Homer S. Elkins, Itinerant Instructor-

Coordinator, Tennessee State Fire School, 215 Chestnut Street, Chattanooga 3.

Texas: The 30th Annual Texas Firemen's Training School will be held July 19–24 at Texas A & M College. Write to Henry D. Smith, Chief, Firemen's Training School, Engineering Extension Service, College Station.

Washington: Bellingham will be the site of the Annual Fire Conference, July 22–25. Write to Mrs. Emma Ethier, Secretary, Washington State Firemen's Association, 3206 East 125th Street, Seattle 55.

West Virginia: The 29th Annual West Virginia Fire School in Morgantown will be held July 20–24. Write to R. E. Hanna, Jr., Director, West Virginia Fire School, West Virginia University, Morgantown.

Wisconsin: Regional Advanced Fire Protection Schools will be held in Black River Falls, August 13–15; and Beaver Dam, August 28–29. For information write to William E. Clark, Supervisor of Fire Service Training, 14 North Carroll Street, Madison 3.

Vaccine from Blood of Burned?

(The following article is reprinted from the Worcester, Massachusetts "Evening Gazette.")

by Science Service

WASHINGTON — Blood from persons who have recovered from serious burns may be "banked" some day to save other burn victims who are fighting for their lives.

A new treatment was given to seven children badly burned last December 1 in the tragic fire at Our Lady of the Angels School in Chicago. Six of the children showed improvement. One of them had been described earlier as "hopeless." The seventh, and most severely burned child, died.

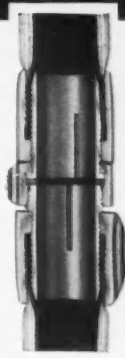
Trial of the techniques was suggested by Dr. Sol Roy Rosenthal, director of the Institute for Tuberculosis Research at the University of Illinois College of Medicine. Dr. Rosenthal, currently under contract to the U. S. Navy, has been studying human blood. He suggested that some of the most severely burned children be given blood donated by persons who had recently recovered from bad burns. This was done, and "dramatic changes" were observed overnight, the Office of Naval Research told Science Service here.

The child who died had Rh negative blood and received only 150 milliliters of "convalescent burn plasma," as it is called. The other children received generally more than this.

Dr. Rosenthal believes the rationale behind this treatment to be that a severe burn results in a release of toxic, or poisonous, material into the blood stream. This toxic material is injurious to the remote tissues of the body. The badly burned person produces antibodies slowly, often too slowly to combat the effects of these toxins on the blood and blood vessels.

Such a person may die from the toxic effects of the burn, whether or not he is severely burned. To combat this threat to the satisfactory progress of the patient, blood taken from other persons who have recovered after being badly burned, is thought to be useful because it contains high amounts of antibodies against the toxins.

The treated children responded so well to the blood transfusion that Dr. Rosenthal believes blood banks should be set up to process and store blood donated by persons who have recovered from bad burns. He urges research to proceed as quickly as possible to confirm his theories, and speculates that it may be possible to prepare a vaccine from burn toxins that could be administered to generate natural immunity, reports Naval Research.



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1. FULL FLOW—no significant reduction of internal diameter. Pressure is assured.
2. STREAMLINED—round-edged design, no projection.
3. INTERNAL EXPANSION—prevents shrinkage of the hose at the coupling.
4. ACCURATELY MACHINED—always the same . . . interchangeable.
5. REMOUNTABLE—can be removed and re-attached with a key any number of times without cost.
6. WEIGHT—no heavier than comparable expansion type coupling.

Available in polished bronze in both standard rocker and forestry lug. 1½" in production. Larger sizes will be available.

Successfully Tested To Bursting Point Of Double Jacket, Single Jacket And Sweat Hose

Recognizing the trend toward higher and higher pressures in fire fighting, Bar-Way has developed a revolutionary coupling that will withstand the pressure and the pull. This new coupling is designed to fire fighting specifications. It guarantees full flow, full pressure, it is streamlined to slip over obstructions, and it can be interchanged anywhere at any time without damage to either the tube or fabric. Specify Bar-Way! Write Bar-Way Mfg. Co., Stamford, Conn.

BAR-WAY MFG. CO., STAMFORD, CONN.

Fire Protection for Chemicals

THESE suggestions on handling various incidents involving alkalis are excerpted from the NFPA book *Fire Protection for Chemicals.* The 152-page book was written by Deputy Chief Charles W. Bahme of Los Angeles and is available from NFPA at $3.00 per copy.

Fire Fighting — Alkalis

If the use of water is necessary to control a fire where these substances are stored (and this precaution also applies to calcium oxide and calcium hypochlorite — with the added danger in the latter case that it yields oxygen) containers which are effectively sealed will present no difficulty, but if any are open, or the materials are exposed to water, they should be flooded thoroughly to obtain sufficient dilution to render the substances noncorrosive before the solutions reach the sewers.

Be careful to avoid open vessels. At a fire in Milwaukee, a fire department officer lost his life when he slipped and fell into a vat of caustic soda.

In overhauling, cover any open drums, and be careful not to get any of the material on the skin to avoid painful burns. If some is accidentally splashed on the skin, flood with water and apply vinegar or diluted acetic acid; then treat as a burn.

Small spills of the caustic solutions can be washed off and then sprinkled with soda ash or bicarbonate of soda to remove the last traces.

Outside Employment

FIRE Commissioner Edward F. Cavanagh, Jr., of New York City, has been taking a firm stand on outside employment for members of the fire department. A recent departmental order had this wording: Effective June 1, 1959, all chief and company officers shall be prohibited from engaging in any type of outside employment or occupation. The penalty for any violation of this order will be dismissal from the department.

IRFAA Convention

THE 12th Annual Convention of the International Rescue and First Aid Association will be held at the Pick-Nicollet Hotel, Minneapolis, Minnesota, August 13-15. Hosts will be the Friendship First Aid and Emergency Squad of Minneapolis and the Minnesota Rescue and First Aid Association. The program will feature panel discussions of new rescue and first aid techniques, special talks by authorities on the subject and the annual International First Aid Contest. Teams desiring to compete in the contest must first register at the convention and must include at least three persons. Trophies will be presented to the championship team and to the next four placing teams. Competition will be on the basis of three problems and will be conducted, in general, under American Red Cross rules.

For details on the convention and contest write to Executive Director Max L. Spray, IRFAA Executive Office, 101 North Alfred Street, Alexandria, Virginia.

More for your Money...in MORYSVILLE

F-100 Emergency-Rescue Body

- Double rear seats.
- Generator compartment.
- Portable water pump compartment.
- Hose reels.
- Suction hose racks.
- Heavy duty construction. Diamond plate decks.
- Double panel doors with full length rod type hinges.
- Available in any CA. (Shown 60" CA)

MORYSVILLE Body Works INC.

813 SOUTH READING AVE., BOYERTOWN, PENNA.
DISTRIBUTORS IN PRINCIPAL CITIES

Also a complete line of compact and versatile Fire, Fire-Crash, Rescue and Emergency Units and Special Built Fire Bodies. Finest materials and workmanship, extra-rugged construction and original modern design. Compartments arranged for handy stowage of fire fighting, first aid and life saving equipment, helmets, rain gear, tools, tanks, portable pumps and generators, etc.

Write for FREE Literature

New Group in Michigan

RECENTLY fifteen manufacturers and salesmen of fire equipment formed a special club, primarily for the purpose of entertaining fire chiefs of the Great Lakes Division of the International Association of Fire Chiefs. The initial function, scheduled for the IAFC meeting in Grand Rapids, will be held on August 30.

Application for incorporation has been made to the state of Michigan under the name, "Great Lakes Box 15 Club, Inc." Officers chosen were C. T. McGraw, president; Stuart J. Spalding, vice-president; Fred Fischl, treasurer; and Grace C. Clark, secretary. The Board of Directors includes the officers and the following charter members: Harry Sutphen, Lloyd Schafer, Charles Cizek, Dick Voelkart, Norman F. VanGorp and Joe Fishelson. Permanent headquarters will be at the offices of the Circul-Air Corporation, 565 East Milwaukee Avenue, Detroit 2, Michigan.

Qualifications for charter members are that (1) charters be issued in the name of the individual rather than to any company, (2) the salesman or supplier be located in the Great Lakes area and maintain a membership in that division of the IAFC, (3) they regularly attend the annual IAFC convention and (4) subscribe for a minimum of three years membership. All dues in excess of operating expenses will be allocated for entertainment purposes mentioned above. Provision is also made for associate memberships as the charter memberships were subscribed almost overnight. Associate members are suppliers with home offices in the region but who are not members of the IAFC and do not usually attend the national conferences. More information may be obtained from Secretary Clark at the address mentioned.

Text on Radiation

THE U. S. Atomic Energy Commission has been conducting three-day courses for instructors of fire and police department members and for others with a real need for practical information on radiation. The subject matter of these courses has been brought together in a text "Living with Radiation, Part I, Fundamentals," by Francis L. Brannigan of the Safety and Fire Protection Branch of the Commission. This is a 72-page publication available from the U. S. Superintendent of Documents, Washington 25, D. C., for 45 cents.

The material is intended for a layman who requires a basic understanding of the relationship of the radiation problem to his own field, both because of its direct bearing on its own work or because he is an instructor of others. The 8½- by 11-in. booklet should be useful and informative for fire department personnel. Good illustrations are used to focus attention on portions of the text that demand particular attention or clarification.

Better Hose Care-with CIRCUL-AIR
HOSE CONDITIONING EQUIPMENT
WASHERS • DRYERS • TURN-TABLES • STORAGE RACKS

ROTO-JET HOSE WASHER
AUTOMATICALLY
WASHES—RINSES—DRAINS HOSE

ROTO-JET Washes, Rinses, Drains hose thoroughly and quickly. Hose is self-propelled. Simple one-man operation. With or without detergents, ashes, glass and sludge are automatically scrubbed out and flushed away. Lengthens hose life. Foot-Pedal Operation.

FIRE HOSE DRYER

The patented, electrically operated Circul-Air hose dryer circulates pre-warmed fresh air through loosely coiled hose at the rate of 5 to 6 air changes per minute. No other drying method is so fast — so economical — so easy to use. The preferred dryer in over 5,000 leading Fire Departments.

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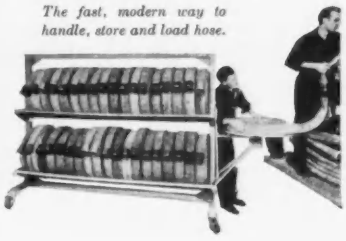
Approved by Underwriters' Laboratories . . . and Canadian Standards Association. Recommended by all leading fire hose manufacturers.

The fast, modern way to handle, store and load hose.



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MOBILE
HOSE STORAGE
AND
LOADING UNIT

Saves valuable space. Holds 1,800 ft. of 2½" hose — proportionately more of 1½" — in an 8 ft. space (when loading table is detached). Roll it right up to the truck for reloading — out of the way when not in use. Equipped with locking fiber-wheeled casters.

WRITE FOR NEW LITERATURE

If you are planning to build or remodel, send for our brochure "Fire Station Design."

THE CIRCUL-AIR CORPORATION
575 EAST MILWAUKEE
DETROIT 2, MICHIGAN

this month's

EQUIPMENT NEWS

New Lightweight Respirator

Packaged for the fire and rescue service in a durable metal-bound fiber case is the Pulmonator (left), complete with airways and face masks in adult and child sizes. For complete information on this new respirator (model 525-F Pulmonator), write to *Western Anaesthesia Equipment Company, Inc.*, 2553 Middlefield Road, Redwood City, California.

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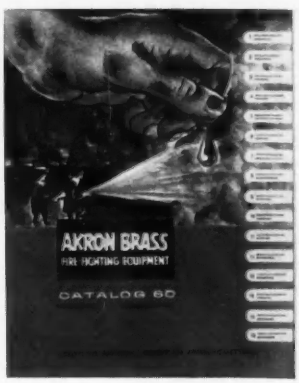

New Equipment Catalog

Just coming off the press, Akron Brass' new catalog No. 60 lists every item in Akron's extensive line, including many new products being introduced for the first time. The full color cover features a unique easy-to-use index. Performance data charts and latest foam system information make this catalog valuable for fire chiefs, industrial fire departments, municipal purchasing officials and government agencies. Copies may be reserved by writing to *Akron Brass Manufacturing Company, Inc.*, Wooster, Ohio, or to *Akron Manufacturing Ltd.*, Aylmer, Ontario.

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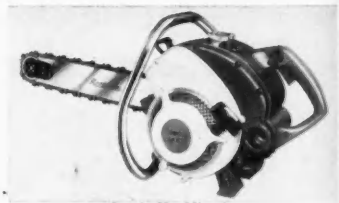


SL-5 Chain Saw

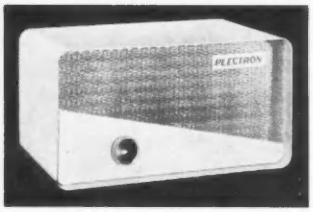
More and more fire departments are adding power chain saws to their emergency equipment. The Rochester, New York, Fire Department chose this *Remington* direct drive unit for use on its several rescue cars.

*See Us in Booth #4 at the I.A.F.C. Convention in Sept.

PLECTRON

THE ALL NEW

RADIO ALERTING SYSTEM



The PLECTRON Sentry

Place a tone activated PLECTRON F.M. Radio Receiver in each fireman's home and send emergency voice messages direct from your present 2-way base transmitter into every fireman's home.

Benefit from selective calling, silent alarms, and fast, efficient alerting.

Receivers available for any radio frequency in the 25-54 and 152-174 megacycle bands, and for activation from any tone frequency between 500 and 3000 cps.

CHECK THESE FEATURES:

- Fully transformer powered.
- Crystal frequency control.
- Tone activated.
- Automatic reset to "silent standby."
- Super-heterodyne receiver circuit.
- Low power consumption — 28 W.
- Designed for "Narrow-Band" reception.
- Long-range reception (10 miles) without outdoor antenna.
- Compactly built in ONE case, easily portable — 10" x 5" x 6" deep.
- Attractive metal case, choice of colors.
- Low cost — $89.50 each.

Distributors and Dealers Throughout the U.S.

For Complete Information Please Write To:

PLECTRON CORPORATION

OVERTON, NEBRASKA

BUYING NEW EQUIPMENT?

Consider the products advertised in this issue.

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Here's why you should use

FIRE-LIK "WET WATER"

● Increases effectiveness of water ● Less water required ● Less extinguishing time ● Less runoff of water ● Provides quicker, easier handling of deep-seated fires ● Increases effectiveness against rubber, gasoline fires and all hard to "wet" materials.

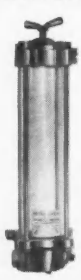
FIRE-LIK cartridges make "wet water" for only ½ cent per gallon. Makes every gallon do the work of 5. Each FIRE-LIK cartridge makes 1000 gals. fire fighting solution. Multiphase. Odorless. Non-Toxic. Stainless. Non-Corrosive. Carton of 12 ..... **$60.00**

DEYNOR "WET WATER" MIXERS

Automatic—portable and stationary mixers. No pumps, motors or storage tanks needed. No more booster tank damage. Proved in use by fire dept. and industrial concerns.

#200-Stationary ... **$99.50**
#200P-Portable ... **$95.00**

Mixers and Cartridges Guaranteed.



Liberal discounts to dealers.

Write Dept. 759 Today for Free Literature

DEYNOR CORPORATION

1 Depot Plaza, Mamaroneck, N. Y.

"That was the hottest and quickest fire I've ever seen!"

New Central Station for ADT

Formal dedication of American District Telegraph Company's new central station at Mineola, Long Island, New York, was held on May 14.

The Mineola central station, the second on the Island, will safeguard commercial and industrial establishments in Nassau and Suffolk counties. Currently serving more than 300 subscribers, it has direct-wire connections to headquarters of ten fire districts, Nassau County Police Headquarters and police in Garden City and Lynbrook. Businesses in Brooklyn and Queens will continue to be served from the Long Island City central station.

SPARKY
T-SHIRTS and SWEAT SHIRTS

Children's sizes only — 2 thru 12

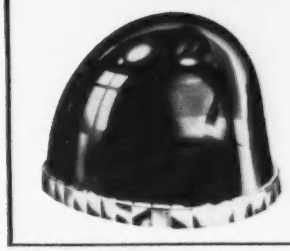
Popular SPARKY emblem in bright Day-Glo red, yellow and black featured on high quality white cotton T-shirts and sweat shirts.

T-SHIRT	SWEAT SHIRT
$1.25	$1.98
postpaid	plus 25c shipping

A postcard brings you a free catalog of other fire novelties and SPARKY products. Order today from —

ROBERTS CO. BOX 86D WAYLAND, MASS.

SPECIAL-



for VOLUNTEERS!

The *FlashBall* is:

- compact
- powerful
- lightweight
- magnetic
- portable — can be carried in the glove compartment, plugged into the cigar lighter and will cling magnetically to the roof or the dash, ready for instant action!

The *FlashBall* is available in red, blue or amber for only $22.50. Write today for *FEDERAL* Bulletin #355.

Most states permit and some even require, that cars of Volunteers be equipped with an identifying light. *FEDERAL'S* Flash-Ball is a light designed especially for Volunteer Firemen or Rescuers. Such a light will get you through traffic with greater speed and safety. This is why *many* Volunteer Departments are now equipping the cars of members with the *FlashBall!*

The *FEDERAL FlashBall* is just like the famous *FEDERAL FireBall*, except that it does not revolve; it projects a powerful, flashing beam straight forward.

FEDERAL SIGN and SIGNAL Corporation 8717 S. STATE ST., CHICAGO 19, ILL.

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USE THIS FORM

to order materials on opposite page

EASY ORDER BLANK

Order early to forestall transportation delays. Orders received after September 18 cannot be accepted.

PLEASE PRINT

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Current Materials — Illustrated

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_____	Display Card Poster, 25¢ ea., discount for quantities	_____
_____	2. Fire Facts for '59 — $2.00 per 100, $15.00 per 1000	_____
_____	3. Stickers — 30¢ per 100, discount for quantities	_____
_____	4. Coloring Sheet — 75¢ per 100, $6.00 per 1000	_____
_____	5. Flyer — $1.00 per 100, $7.00 per 1000	_____
_____	6. Blotter — $1.50 per 100, $12.50 per 1000	_____

Undated Materials — Illustrated

	7. Inspection Blanks	
_____	(a) Home Check List — $1.50 per 100, $10.00 per 1000	_____
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_____	(c) School Check List — $1.50 per 100, $10.00 per 1000	_____
_____	8. Sparky Coloring Book — 5¢ ea., $5.00 per 100, $45.00 per 1000	_____
	9. Comic Books — $5.00 per 100, $45.00 per 1000	
_____	(a) Early Man and Fire	_____
_____	(b) Man Learns More About Fire	_____
_____	10. Sparky Comic Book — 5¢ ea., $5.00 per 100, $45.00 per 1000	_____
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_____	Sparky Face Mask for Sparky costume, rubber—$1.00 each	_____
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_____	Sparky membership kit; badge, card, inspector's manual — 25¢ each, 20¢ each in lots of 5 or more	_____
_____	Story of Sparky's Fire Dept.; 8-page booklet on children's fire safety program — no charge, 1 copy per order	_____
_____	Tested Activities for Fire Prevention Committees; 84-page booklet, illustrated — no charge, 1 copy per order	
	Total	$_____

Prices subject to 2% discount if payment accompanies order. All prices F.O.B. Boston. ORDERS SHIPPED EXPRESS COLLECT. NFPA members may receive single copy of all items gratis. Others may receive samples of all items except Display Card free upon request. Items No. 1, 2, 4, 5, 7, 8, 9, 10, 11 (a), (b), (c), (d), 12 (a), (b), (c), (d), (e), (f), have space for imprints of names of campaign sponsors which may be added locally by purchasers.

NATIONAL FIRE PROTECTION ASSOCIATION

60 Batterymarch Street, Boston 10, Massachusetts

Fire Prevention Week Materials

THE new, colorful items prepared by NFPA for the coming Fire Prevention Week are shown on the opposite page. NFPA member fire departments can get the most effect from these items by ordering them now and planning for their distribution. It takes time to go out and arrange for a display of posters in various industrial and mercantile buildings. It takes time to let school authorities know about the availability of the School Check List and they, in turn, need time to prepare for their roles in Fire Prevention Week activities.

There has been an upsurge in the demand for Sparky materials for the youngsters and this year a special one-minute film with the new Sparky song is available. This will be particularly useful in schools but might also be shown on television broadcasts. Again, it takes time to arrange for effective use of this film.

The popular "Fire Facts for '59" has a lot of basic information and statistics that can be worked into talks during the Week. The numerous folders can be put to good use in industrial plants. Of course, the coloring books and other items for educating the youngsters are always in strong demand. Your Fire Prevention Week Planning Committee ought to find the booklet "Tested Activities" very helpful — provided that the booklet is ordered and received early enough for the committee to act on its suggestions.

Because all of these preparations for Fire Prevention Week are so time-consuming, the NFPA Public Relations Department made a special effort this year to have these useful materials ready for early distribution. Accordingly, fire departments and industry can take advantage of this early announcement by sending their orders now to the NFPA Publications Department, 60 Batterymarch Street, Boston 10, Massachusetts. The simplest way to order the materials is to use the blank at left checking off the number and type of items desired. *Please note! Orders received after September 18 cannot be accepted.* There is just not enough time to guarantee shipment of materials after that date to arrive in your community before Fire Prevention Week.

Get these colorful items for

Fire Prevention Week, October 4–10, 1959

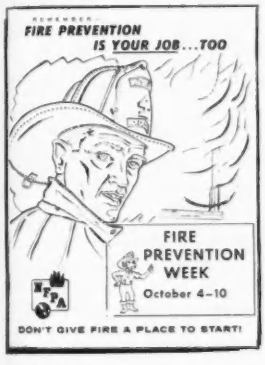
1. POSTER — 11 x 17, Red and Black (also available on display card)

7. INSPECTION BLANKS — 8½ x 11
   (a) Home Check List for self inspections
   (b) Sparky's Home Inspection Blank
   (c) School Check List for school and public distribution

2. FIRE FACTS FOR '59 — 8½ x 11, 2-page color fact and picture sheet

3. STICKER — 1½ x 1⅛, 2-color, perforated, for use on outgoing mail, packages

8. COLORING BOOK — 6 x 9, 16 pages of coloring for children, with fire prevention story and new Sparky song



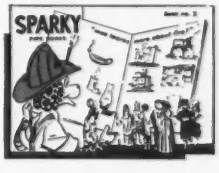
4. COLORING SHEET — 8½ x 11, Fire Prevention Week poster for children to color

6. BLOTTER — 3¾ x 8½, 2-color

10. SPARKY COMIC BOOK — 7½ x 10, full color 16-page cartoon story of fire departments

9. COMIC BOOKS — 5 x 7, full color
   (a) Early Man and Fire
   (b) Man Learns More About Fire

(a)



(b)

YOUR CLOTHING CAN BURN!
YOU are... ...on the spot!
Building Buying Owning THE FIRE SAFE HOME
WHEN FIRE STRIKES You
YOUR FAMILY AND FIRE

(a) (b) (c) (d) (e) (f)

12. FOLDERS — in color, for mailings, home and employe distribution

5. FLYER—5½ x 8½ 2-color, use in mailings, employe distribution, etc.

(a) (b) (c) (d)

11. FOLDERS — in color, for mailings, employe and home distribution

FIREMEN
60 BATTERYMARCH ST.
BOSTON 10, MASS., U. S. A.

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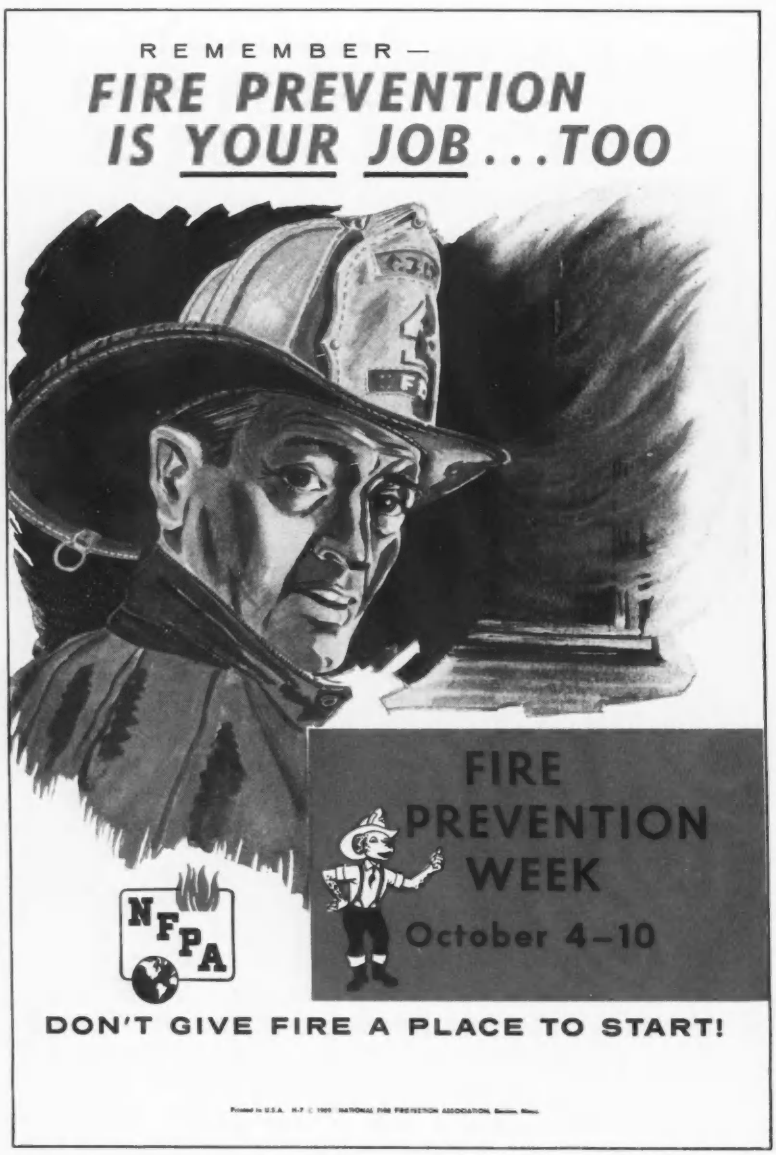

Getting ready for Fire Prevention Week?

Be sure to order a supply of this colorful new NFPA poster in plenty of time to distribute it throughout your community. Imprint the name of your fire department below the slogan "Don't Give Fire a Place to Start!" then make certain that the poster is displayed prominently in stores, schools, warehouses, industrial plants and other buildings. (For other Fire Prevention Week materials see inside back cover of this issue.) Order now for quick delivery.

Size — 11 by 17 inches. Prices — $3.00 per 100; $25.00 per 1000.

Order from

NFPA Publications Department
60 Batterymarch Street
Boston 10, Massachusetts